

IQLR

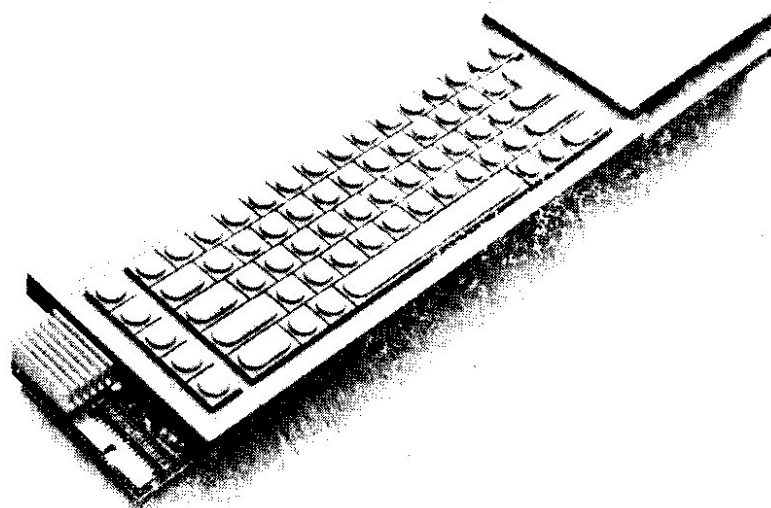
International QL Report

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March - April

1994

MIRACLE'S NEW MIRACLE



SUPER GOLD CARD

IQLR.....

Contents.....

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We welcome letters, comments, suggestions and articles from our readers. Our magazine is constantly changing to meet the needs and requirements of all QDOS users.

Articles submitted for publication should be on a 3.5" DD disk in Quill or Text87 format. To enhance your article (if at all possible) send Saved Screen dumps produced with the Sbytes command. Please specify where in the text you would like the screens placed.

Article and Advertising DEADLINES are as follows:

Issue 1	15 April
Issue 2	15 June
Issue 3	15 August
Issue 4	15 October
Issue 5	10 December
Issue 6	15 February

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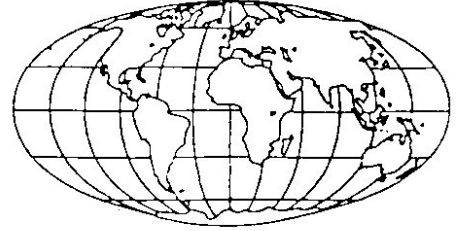
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INTERNATIONAL QL NEWS

This column is designed to bring together new and/or changing developments within the QDOS community. the information contained here has been reported to IQLR by individuals and/or suppliers who desire to keep you informed as to their recent activities.



MIRACLE SYSTEMS LTD - Osbaldwick, York, Great Britain

The biggest story of the year (so far) has been the recent launch of Miracle's SUPER GOLD CARD. Recently shown at the Scottish Workshop in Edinburgh and at the International QL Meeting in Bielefeld, Germany, it is being received with wild enthusiasm.

The SGC contains 4M of fast 16 bit Ram, a 25MHz 68020 processor (reported to be 3 times faster than the Gold Card), a fast REAL Centronics printer port, 2 disk drive ports (will operate 4 disk drives), a virtually crash-proof clock and a socket to optionally connect 5V.

Miracle Systems are NOW taking orders for the SUPER GOLD CARD and expect the first deliveries to be made in three to four weeks. Please note their advert on the back cover for additional information

PROGS - Veltem, Belgium

Have announced the release of their much acclaimed LINEDESIGN V2, a total rework of their popular LINEDESIGN. Faster, more fonts, improved text handling facilities, the entire program has been improved.

Joachim and Nathan have prepared a demo version capable of doing everything LINEDESIGN V2 does, the only differences being that the PROGS logo will always be printed on top of the drawing you produced and you get only a few of the fonts available. The demo can be obtained by sending a formatted 3.5" disk and return postage to IQLR.

Their second new offering is PROFORMA. A programmers library, it gives C (C68) programmers the ability to write programs using the PROGS Font and Raster Manager. This is the dedicated graphics library used for the development of LINEDESIGN V2. It supports scalable and vector graphics and can be used from Assembler. Pricing for PROFORMA is BEF 5000.

ERGON DEVELOPMENT - Reggio Emilia, Italy

Has announced that DILWYN JONES COMPUTING is now their UK distributor for their entire line of software. In addition, they have announced major price reductions and improvements to their software, so that the programs now run on the QXL, QVME and with Minerva's second screen and with any screen resolution (QL, EGA, VGA or SVGA).

INTERNATIONAL QL NEWS - (CONT'D)

JOCHEN MERZ SOFTWARE - Duisburg, Germany

This prolific software house is at it again, with the release of 3 NEW packages. The first is a brandnew version of our old friend QMON/JMON with an addition. Now adapted for the pointer environment, it recognizes the various stack frames and cache handling of the different processors 68000 to 68040. JMON is a job- monitor that has its own moveable windows.

The second package is a major upgrade, QD Version 6 now has selective automatic tab compression/expansion and permanent line/column display plus many, many more improvements.

The third is a Tetris like game titled DOUBLEBLOCK, with various levels of difficulty, differently shaped items and a two player option. Please note their advert for more information.

J. D. HANNAM, INC - Placentia, California, USA

Tim Brunk president of J. D. HANNAM, INC has announced that they have recently moved into new offices. Please be advised that while their 800 telephone number (800 228 0308) remains the same, their Fax number has been changed to : 714 961 0491. Please note their NEW address in their advert elsewhere in this issue.

QBox-USA



810-254-9878



24 hours a day, 300/1200/2400 baud
(a new high speed modem, up to 14400 baud will be online soon)

QBox-USA is a BBS set up by QL enthusiasts for QL enthusiasts.
The system runs entirely on a Sinclair QL. We maintain a link (Fidonet) with European BBS's that carry QL related message areas. With QBox-USA North American QL users can keep in touch with our fellow QL users in Europe and keep up with the latest developments for the QL and QDOS.

We are currently carrying the following message areas:

INTERNATIONAL QL, MINERVA, QUANTA and QBOX.

There are also file areas that contain many programs available for download. Just a few of the files available are: QIPI, QFAX, Zip/Unzip, QLterm, QLCIF and many more! There is no charge to use QBox-USA other than normal phone call charges. Please give QBox-USA a try!

We look forward to your call!

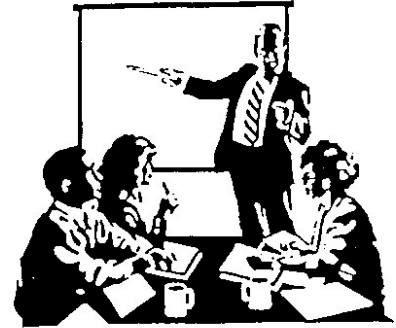
produced using Page Designer 3

EDITOR SE (PART3)

Massapequa, New York, USA - Bob Gilder

"An Overview, Tutorial and some Ramblings "

Before going ahead with the third installment of this tutorial, I would like to offer an apology to our readers of IQLR and Digital Precision Ltd., for failing to review one additional upgraded file included in the latest version of The Editor Special Edition software; the EDT_charset.



At the beginning of summer I set up a spare QL with Gold Card, disk drives and a 12 inch RGB analog monitor in a cool room located at the North-East section of my home to take advantage of the cool off-shore sea breezes. I received the latest edition of The Editor S.E. shortly after I had made this move. When I booted up Editor, and typed in a few lines, I was amazed at the clarity of the text output on the 12" monitor as compared to the output from my 14" RGB monitor, used in my main computing area. Only when I switched back to my first set-up in early fall and booted up my original Editor program, did I realize that something was not right!

Then I Booted up the latest version of Editor S.E., Read in some text and with amazement, the text appeared to 'light up' the monitor screen. The upgraded version of The Editor S.E. sports a NEW Characterset - and it is very easy on my eyes. You must see it to believe it, regardless of various screen and ink color combinations on the monitor screen - It is great! So... Check your EDT_charset file by comparing the byte count of your original EDT_charset to the upgraded file. MY original Charset file contained 1242 bytes and the new Charset file contains 2418 bytes.

Thank you Freddy!! The EDT_charset file alone is well worth the cost for the upgraded version of The EDITOR S.E.

Within Part 2 of this series, outlined were some of the text commands for paragraph Reform and Right and Left line justification. When editing any file within the Editor environment and the JR command is used to justify text to the right margin, you must be very careful when editing the last line of a paragraph. Normally, the last line of a paragraph is shorter than the rest of the paragraph.

Let us say, for example, the last line in this paragraph contains only 3 words and one of the words has an error in it; the word is spelled wrong. You place the cursor on the offending character and delete it and then you replace the proper character in the word. Then then you move the cursor down to the start of the next paragraph and all of a sudden the last line of the above paragraph justifies to the right - the first word remains stationary, the second word moves to the center of the text and the last word is smack against the right margin boundary. You then move the cursor up to that line in a frenzy and reformat that line with the delete keys, move the cursor off that line and again right justification takes over and again does just what Justify Right should do, it justifies the same words again as it did before!

Rule of the thumb: If you must edit a short line of text when Right Justification is in effect, either before or when your cursor is on that line, enter the JL (Justify Left) command and all will be OK! - or if the offending line has already right justified the line, then place the cursor at the beginning of that line and enter the PR (Paragraph Reform) command and

EDITOR S/E - (CONT'D)

allow it to settle back at the start of the left margin. - or you can press ENTER after the last word of that line and the current position of each word will remain stationary. If you opt to use ENTER, remember you are creating an additional blank line between this paragraph and the following paragraph.

Another similar problem to the one above can occur when editing a line(s) which were formatted within a Temporary Left margin atmosphere (Temporary Left margin is set by an ALT-TAB combination under the cursor) and text is Right Justified. Again as outlined above, set justification to JL.

When using the Temporary Left Margin (ideal for indenting text, such as emphasizing examples, leaving a blank area for graphics or screen dumps, etc.) and you require Right Justification of text, first set up the ALT-TAB key combination and with the cursor still at that point, enter the JR command and all text will justify right regardless of how many lines of text are typed into your file. When text indenting input has completed press the ENTER key twice, which signals Editor that you are now using the normal margin setup as before the temporary margin was established.

While on the subject of Justification, there are two more commands that justify text, JM (Justify Middle) and JC (Justify Center) - there is a difference between both of these commands even though both commands appear similar to each other - JM will place text such as a heading at mid-point between the current left and right margin settings. JC is positioned on the current line and the text is moved to the mid-point of that line, one half the distance of the right margin width - the indent and left margin is ignored.

For users of Spellbound The Editor is compatible with this spell checker program. To activate Spellbound enter the key combination of CTRL-SHIFT-O. You MUST use this combination because CTRL-O will print out an 'O' with a bar on top and this will not signal Spellbound to awake! Once The Editor recognizes Spellbound's presence, Editor allows the normal Spellbound commands to be activated using the normal key combinations of CTRL-A, CTRL-E, CTRL-W, CTRL-D, CTRL-R and CTRL-I thru 5.

Incidentally, I use Spellbound only after my files are completed - I enter CTRL-C to leave Editor and then load in Spellbound and then EXEC Filebound. At Filebound's request I enter in my input and output filename and awake Spellbound and allow Filebound to perform spellchecking.

When the spellchecking process has completed (I should say, ERROR checking), I READ the spellchecked file into Editor. Then I press F7 (or SHIFT-F2) which sets up the start of an empty FIND string.

F//

Notice that there is a null string between both slash characters, which is available for the user to fill in that space with a character or string. Before filling in the Find string, place the cursor at the top of the file. I will then enter an '^' character between both slash characters and then press ENTER so that Editor can locate the first spelling error by placing the cursor on the power (^) character or 'hat' as Spellbound calls it. The offending word is carefully looked at to insure that this word is part of the Spellbound dictionary or the word is actually mis-spelled. The 'hat' is then deleted and the spelling is corrected if

EDITOR S/E - (CONT'D)

necessary. The routine is repeated by either pressing F7 or SHIFT-F2, ENTER, until all errors are corrected. Using the F/^/ string will insure that you will not miss any words containing '^'. The completed spelled checked file is then Written to disk twice, using an additional character at the end of the original filename, such as EDSE3 and EDSE3a (the actual name of this particular file).

When writing the second filename to the media as a backup file, I activate the 'F8' key or SHIFT-F3 (repeat previous command) and the first filename appears on the command line at the bottom of the Editing screen. Then the ALT-RIGHT cursor key combination is pressed which places the cursor at the right side of the last filename character and then I will enter, say, 'a' for my second filename, 'EDSE3a'. This is a very fast operation!

I normally Write to disk after completing between 60 to 70 lines of text, which means that I must overwrite my text on disk. The only caution I would like to state is that during any or all occurrences of overwriting a file to a media, Editor will ask if you wish to OVERWRITE the file with (Y/N)?. If you are sure that you have entered the correct filename, enter either 'Y' and press ENTER or for faster action press ENTER. Be careful and make sure that the filename is correct before you overwrite a file. Entering 'N' or ESCAPE will allow you to abandon the Write command and provide you the time to insure that you will write the file to disk with the proper filename instead of overwriting another file.

At this point I would like to introduce the Cursor Control functions:

Move one character - Normal Left or Right cursor

Delete one character - Combination of CTRL-Left or -Right cursor

Move one word at a time - Combination of SHIFT-Left or -Right cursor

Delete one word at a time - Combination of CTRL-SHIFT-Left or -Right cursor

Move cursor to END/BEGINNING of line - Combination of ALT-Left or -RIGHT cursor

Delete entire line from beginning or end - Combination of CTRL-ALT-Left or-Right cursor

Move one line at a time - UP or Down cursor

Delete entire line with cursor anywhere on line - Combination of CTRL-SHIFT-ALT-Left cursor

Move line down - combination of CTRL-Down cursor or ENTER

Delete characters from right to left - Combination of CTRL-Left cursor

Move cursor to top or bottom of screen - Combination of SHIFT-Up or -down cursor

Scroll screen up or down - Combination of ALT-Up or -Down cursor

Scroll entire page up or down - Combination of SHIFT-ALT-Up or -Down cursor

Starting paragraph of current page - Combination of CTRL-ALT-Up cursor

Last paragraph of current page - Combination of CTRL-ALT Down cursor

Temporary Left margin - Combination of ALT-TAB

Section 6.1 through 6.2.7, pages 24 through 31 explains the above Immediate commands in detail; also, the first page of the Editor HELP file can provide assistance. The majority of the intermediate commands outlined above provide the Editor user with extremely fast editing features, especially when paging through one screen after another. I use this one for adding page numbers to all footers in my text files. After page one footer has been numbered, I move the up cursor up three lines, then the combination of SHIFT-ALT-Down cursor three times places the cursor right on the footer line of the next page at the proper page number column position. This is repeated until all footers are numbered. It only takes several seconds to enter each footer number this way.

EDITOR S/E - (CONT'D)

Cursor Controls:		Move	Delete	
Character	:	+	CTRL/+	CTRL/+
Word	:	SHIFT/+	CTRL/SHIFT/+	CTRL/SHIFT/+
End line	:	ALT/+	CTRL/ALT/+	CTRL/ALT/+
Line	:	↑	CTRL/SHIFT/ALT/+	
Line	:	↓	CTRL/+ (col 1)	
Screen	:	SHIFT/↑		
Scroll	:	ALT/↑		
Screen page:	:	SHIFT/ALT/↑		Temp Margin
Start parag:	:	CTRL/ALT/↑		Left margin: ALT/TAB
General:				
Toggle Overstrike & Insert mode F5; Redraw; resize screen F4; SHIFT/F4				
Execute; re-execute Command group F3; F2				
Edit & execute last Command group SHIFT/F3				
Edit & execute Last Find/Exchange SHIFT/F2				
Re-execute Last Find/Exchange CTRL/F2				
Start Command processing ENTER; Interrupt/halt Commands ESC				
Force garbage collection SHIFT/F5				
Command format:				
Commands may be entered singly or in groups, space or ';' separated				
A number may prefix any command or group - it is treated as a repeat count				
A group is specified by enclosing the commands in brackets				
e.g.				
10 (n/a/appendd line/13n) ; sh				
Line: 34 Col: 84 Line count: 24 Mode: Insert				

The line delete commands are the only immediate commands I shy away from - they delete too fast for my liking. I prefer deleting one word at a time because sometimes a phrase will pop into my head and I can resurrect the remaining line. However, for those of you who like to gamble, you can delete the line and if it bothers you that perhaps it was the wrong thing to do, just enter the following: F3, UD

UD, Undo last deleted line - and as though you were a magician, the deleted line appears as the line was originally written.

There is another beneficial use for the UD command. A line of text can be prepared, such as a footer and can then be deleted using the delete line command. This line **MUST** be the last Undo deleted line which can now be used as if it were a block insert command. When a line of page is completed, place the cursor on the footer line and issue the UD command and the deleted footer line will appear on that line. This process can be repeated throughout the entire text file provided that you **DO NOT** issue any other delete line commands before you finish adding all of your footers to your text.

There is another UNDO command which will undo current changes to a line. In other words, if you substitute words within a line and you now wish to change that line back to the original text, issue the 'U' command from the command line and the original text will be displayed as long as the cursor is not moved off from that line.

Multiple column text:

Earlier in this series, I had mentioned that double-column text wasn't difficult to produce within the Editor environment. First, you must produce the text file! The next step is to determine how wide each column of text should be. When I print out multiple column text, it is usually 38 characters wide for both columns.

The margins spanning the text are set at 80 characters in width, with a four character space between each column. The printer is set for PICA pitch, 10 characters per inch (usually the default pitch for printers). Three or four columns of text can be produced on the screen, however, the printer must be set for 12 to 20 characters per inch in order to produce the proper printout from the printer to accommodate 8 1/2 inch printer paper.

The following Command file will produce two, 62-line columns of text for an approximate 124 line text file.

file: 2COL_cmd

```
T SI1 SL1 SR38
BTK BH RP PR
T GL63 BS GL124 37CR
BE T 42CR BM BH
```

EDITOR S/E - (CONT'D)

The first line of the 2COL cmd file starts with T (Top of file; cursor at line 1, column 1). It should be mentioned that the text should not have a header! The header should be added to the text AFTER the text has been processed to double columns, otherwise if a header is present when processing the text, the start of the second column will be on the same line as the header. See NOTE below.

LINE 1: SI1 sets the left indent margin to column 1; SL1 sets the left margin at column 1; SR38 sets the right margin at column 38 (If you prefer to have your text columns smaller, change SR38 to another smaller figure).

LINE 2: BTK sets the Block to type column; BH will highlight the completed block; RP repeats the next command PR, paragraph reform, and all text within the file will be formatted at 38 characters wide.

LINE 3: T cursor to line 1, column 1; GL63 move the cursor to line 63, column 1; BS Block start marks the current cursor position; GL124 moves the cursor to line 124, column 1; 37CR moves the cursor to column 38 on line 63.

LINE 4: BE Block end is marked at column 38, line 124, (the completed block should now be highlighted); T cursor moves to column 1, line 1; 42CR moves the cursor to column 43; BM moves the block of text to column 43, line 1, BH extinguishes the highlight from the block.

If you intend to key in the 2COL cmd file, type it in exactly the way it appears in the text. It will work! Write it to disk using W.2COL cmd. Before activating the command file for processing 2 column text, place the cursor at the top of file, column 1, line 1; then type on the command line, RC.2COL cmd, ENTER and Editor will oblige by converting 80 column text into two neatly formatted columns of text.

Incidentally, you have the option of setting line justification (JL or JR) before activating the command file. JL justifies text left for a ragged right appearance while JR provides uniform columns of text.

Within Part 2 of this series, I outlined some of the text commands for paragraph Reform and Right and Left line justification. When editing any file within the Editor environment and JR command is used to justify text to the right margin, you must be careful when editing the last line of a paragraph. Normally, the last line of a paragraph is shorter than the rest of the paragraph.

Let us say, for example, the last line in this paragraph contains only 3 words and one of the words has an error in it, the word is spelled wrong. You place the cursor on the offending character and delete it and replace the proper character in its place. Then then you move the cursor down to the start of the next paragraph and all of a sudden the last line of the above paragraph justifies to the right - the first word remains

combination under the cursor) and text is Right Justified. Again as outlined above, set justification to JL.

When using the Temporary Left Margin (ideal for indenting text, such as emphasizing examples, leaving a blank area for graphics or screen dumps, etc.) and you require Right Justification of text, first set up the ALT-TAB combination of keys and with the cursor still at that point, enter the JR command and all text will justify right regardless of how many lines of text are typed into your file. When text indenting input has completed press the ENTER key twice, which signals Editor that you are using the normal margin setup as before the temporary margin was established.

While on the subject of 'Justification', there are two more

Line: 24 Col: 84 Line count: 24 Mode: Insert

Now you can add a header to your text by placing the cursor at the top of file and press ENTER twice and the text will move down two lines, providing space for a header or you can set up a block for the entire double column text and move the text to a desired line.

To set up a block: Move the cursor to the beginning of the text with the command T. Mark the block start at this position (BS) and then move the cursor to line 63 (GL63) and place the cursor to column 80 (79CR) or (ALT-Left cursor) and mark the end of the block (BE). Now move the cursor to the start of line 63 using the combination of ALT-Left cursor. Move the cursor down several lines and move the block to this position (BM). The block will be

EDITOR S/E/ - (CONT'D)

positioned several lines below the original block providing space at the top of your text file for the addition of a header.

NOTE: The above 2COL_cmd file and the 3COL_cmd file below, can be altered using files that do contain a header. All you have to do is change all occurrences of the command T to GL(line number) for the first line of your text file such as GL4 and the Header will remain as it was when written into Editor and all text below will be processed to a multi-column format. I did not mention this before because I wanted you to go through the exercise of setting up blocks of text and moving them around the screen.

After adding the header at the top of the file, you could also place a footer at the file bottom if necessary. After your single page file is completed, you have the option of writing the file to your media with either of the following commands: W.2COLtext1 or BW.2COLtext1

If you write your file to disk using the command 'W', any additional text not processed within your text file will also be written along with the double column processed text. This assumes your original text file had more than 128 lines of text.

Setting up a 66 line block of text (assuming 11 inch length of paper) and saving the file with 'BW' will ONLY write the block of 66 lines of text onto your media.

NOTE: If you want to change the length of the text columns, change each occurrence of the command GL63 to whatever length of text you require. Remember that the start of the first line of text for the second column must follow the last line of text on the bottom line of column one.

OK! We have processed a full page of double column text suitable for producing a flier, or perhaps a short newsletter with multiple pages stapled or clipped together. However, if we intend to produce documentation with multi-column output the margins must be widened to accept binding for 3 or 4 hole punching on the left hand side of the page.

Again, we have to think this out. If our pages will be printed one after another in numerical order (the back of each page blank), then we have to widen the left-hand margin by four columns; SI5; SL5; and reduce both column widths from 38 characters to 36 characters; (SR40. On the third line of our original 2COL_cmd file we must add an additional command, 4CR between the commands GL63 and GL124 which will place the cursor at column 5 for the start of the block. On that same line 37CR must be changed to 39CR. On the fourth line of our original _cmd file, we must change 42CR to 44CR.

file: 2COLodd_cmd

```
T JR SI5 SL5 SR40
BTK BH RP PR
T GL63 4CR BS GL124 39CR
BE T 44CR BM BH
```

The finished product of the modified 2COL_cmd file will display 2, 36 columns of text with a four column left-hand margin suitable for hole punching. I've titled this _cmd file 2COLodd_cmd.

Now we must think again! If you intend to produce two column output for pages with text on both sides of each page, then we have to make additional changes to our _cmd file. Why?

EDITOR S/E - (CONT'D)

Page 2, the back of page 1, requires the right-hand margin to be lengthened four columns wide and both left-hand margins set to column one for hole punching (a mirror image). So, for those of you interested in producing high quality, multi-column text output, let us make the following changes to our original 2COL_cmd file and when completed call it 2COLeven_cmd.

file: 2COLeven_cmd

```
T SI1 SL1 SR36
BTK BH RP PR
T GL63 BS GL124 35CR
BE T 40CR BM BH
```

By now, you should understand all of the changes made to the commands in the 2COLeven_cmd file. If you are not sure why these modifications were necessary, study all three 2COL_cmd files, then work with them and I am sure that you will fully understand why these changes were necessary.

Listed below is an additional command file which will produce 3 columns of text. You will notice that the first four lines are identical to our original 2COL_cmd. I have added 3 more command lines for processing a third column of text. Also, take notice that I have not changed the right margin setting. To properly print out 3 columns each, 38 characters wide, with an 80 column printer, I placed a printer control command at the beginning of the text to output 17 characters per inch (Compressed pitch) which is actually quite readable.

file: 3COL_cmd

```
T SI1 SL1 SR38
BTK BH RP PR
T GL63 BS GL124 37CR
BE T 42CR BM
GL125 BS
GL186 37CR BE
T 84CR BM BH
```

LINE 5: GL125 Go to line 125, BS start 3rd block.

LINE 6: GL186 Go to line 186, 37CR move the cursor to column 38, BE mark block end.

LINE 7: T cursor at top of file, 84CR position cursor at column 85, BM move block to column 85, BH remove block highlight.

The following table will provide data for use when setting up margins and text columns within the 2COL and 3COL command files. The printer control sequences outlined in this table are for Epson/IBM compatible printers.

PITCH	Number of characters per inch	CHAR\$ printed 80 col printer	PRINTER Control Code Sequence
PICA Pitch	10 characters per inch	80 characters	ESC+P
ELITE Pitch	12 characters per inch	96 characters	ESC+M
MICRON Pitch	15 characters per inch	120 characters	ESC+G
COMPRESSED pitch	17 characters per inch	136 characters	ESC+CTRL-O (on)
COMPRESSED pitch	17 characters per inch	136 characters	ESC+CTRL-R (off)

EDITOR S/E - (CONT'D)

When ELITE Pitch and COMPRESSED Pitch are set simultaneously, printer output will be 20 characters per inch - 160 characters ESC+M, ESC+CTRL-O

To the left, is an actual printout of five different font pitches within the double column format.

12345678901234567890123456789012345678
This is PICA Pitch 10 characters per

The Pica pitch format displays 38 characters per column for text and four character spaces between both columns as per 2COL_cmd.

123456789012345678901234567890123456789012345
This is ELITE Pitch 12 characters per inch,

The Elite pitch format displays 45 characters per column for text and six characters between both columns.

1234567890123456789012345678901234567890123456
This is MICRON Pitch 15 characters per inch, 80 column

The Micron pitch format displays 56 characters per column for text and eight characters between both columns.

12345678901234567890123456789012345678901234567890123
This is COMPRESSED Pitch 17 characters per inch, 80 column

The Compressed pitch format displays 63 characters per column for text and ten characters between both columns.

123456789012345678901234567890123456789012345678901234
This is a combination of ELITE Pitch and COMPRESSED Pitch simultaneously

The combination of Elite and Compressed format displays 74 characters per column for text and twelve characters between both columns.

Note that the 74 character display per column is quite easy to read. Using font pitches from 12 characters to 20 characters will allow up to double the amount of text you can print onto a single sheet of paper.

When your double column format is expanded from 84 columns up to 160 columns on the screen, you will find that you must page right beyond the first 84 character screen onto a second screen. Don't worry about this! The whole text file can be written to disk as it appears without any problems at all. Using the proper printer control character sequences will advise your printer to change the original font pitch to another font pitch.

If you plan to use several different font pitches within a single text file, regardless of single or double column format, I have found that problems can occur during printing. Some times the printer gets rattled unless you enter ESC P (Pica) followed by the Escape sequence for the different pitch. This is how my Panasonic KXP1124 printer will acknowledge Compressed pitch for printing after, say, Elite pitch: ESC P ESC CTRL-O. The default pitch on my printer is Pica, 10 characters per inch.

Now that you have gone through the exercise for processing two or three column text from an 80 column text file, you should page down (ALLT-SHIFT-Down cursor) to the bottom of your multi-column text file. Below this portion of processed text you will notice quite a few blank lines.

As an example, you have READ into The Editor, a four page text file for processing to a two column format. The 2col_cmd file is executed and all text has been first processed to 38 columns. Column two has now been set up as a block of text with the block column command (BTK) and moved from it's original position to another position at the top of the file, next to the first column of text, with four spaces between them.

EDITOR S/E - (CONT'D)

All lines between line 63 and 124 are blank, because we had to use a column block for the second column of text. When a column block is moved anywhere within the Editor environment, it leaves a blank area on the screen, even though there is text at line 125 and downwards. Below is a very simple solution to this problem if you intend to move the remaining text up to line one for processing the remaining text to a multi-column format.

First, WRITE your processed text to disk by setting it up as a block of text as described earlier in this section. After it is saved to disk, DELETE the block with BD. Enter the following on the Command line: F3, T BTL BS GL124 BE BD

F3 places an active cursor on the Command line; T top of file; BTL Block Type Line; BS Block Start; GL124 Go To Line 124; BE Block End; BD block Delete.

If you would like to see the lines of text highlighted before they are deleted, add the BH command after GL124. When the Line Block has accomplished its task of deleting the 24 lines of text, all text from line 125 and below, will move up to Line 1. Now you can activate the 2COL_cmd to process your additional text into two column text.

For three column text, change the command from GL124 to GL186.

Within Part 2 of this series, I outlined some of the text commands for paragraph Reform and Right and Left line justification. When editing any file within the Editor environment and JR command is used to justify text to the right margin, you must be careful when editing the last line of a paragraph. Normally, the last line of a paragraph is shorter than the rest of the paragraph.

is Right Justified. Again as outlined above, set justification to JL.

When using the Temporary Left Margin (ideal for indenting text, such as emphasizing examples, leaving a blank area for graphics or screen dumps, etc.) and you require Right Justification of text, first set up the ALT-TAB combination of keys and with the cursor still at that point,

make mistakes in spelling) I READ in the spellchecked file into Editor. Then I press P7 (or SHIF7-P2) which sets up the start of a FIND string.

//

Notice that there is an empty string between both slash characters which is awaiting for the user to fill that space with a character or string. I

A thought about writing your own Command files such as those outlined above:

I would venture to guess that a large majority of QL users had started computing with either a ZX80, ZX81, Timex TS100, The Spectrum or Timex 2068. The reason for this mention is: Within some of the user manuals for those computers, one page displayed the full pixel grid for the monitor screen. I duplicated that page and used the grids for set-up of text and bar graphs. We can produce a grid 84 characters wide and 24 characters in length or purchase graph paper. Using the above cmd files we could then plot all of the three 2Col_cmd files through their various stages. I haven't used this method on the QL; I just offer our readers this thought - to make the job of writing command files a lot easier.

For additional information on multi-column CMD files, refer to the COLUMN_cmd file on your original EDITOR disk. The November 1992 issue of Sinclair QL WORLD, page 6, 'Troubleshooter' by Bryan Davies, outlines a command file listing and provides an explanation for Bryan's double column cmd_file.

At this time I would like to discuss in detail some of the commands which we used in the multi-column command files above. I am sure that the CR command as written may cause some concern as to whether a mistake was made by using 37CR to place the cursor at column 38.

EDITOR S/E - (CONT'D)

Note that the command GL124 written prior to the command CR37, which places the cursor on line 124, column 1. Since the cursor is occupying column 1, the cursor must move 37 characters to the right placing the cursor at column 38. $1 + 37 = 38$. Whenever we use the T (top of file), B (bottom of file), and GL with a line number, the cursor is always placed at column 1.

Many times I am asked about the Editor margin commands, such as: "Why don't the text follow the margin commands I have set up when I load a file into Editor?". First of all, you have to understand that The Editor wasn't designed to do so since the program will accept many different types of files other than 'raw' text files. When loading in machine code programs using, say with the RU command, the file will spread out to 255 characters on some of its lines. Assembly language listings loaded into Editor are allowed to be displayed in the format in which they were written as well as SuperBASIC listings which do not like to have their lines broken.

Set up the margin requirements, either before or after a program is read into The Editor; then issue the justification command you require, such as JR or JL and then command Editor to format the complete file with RPPR, which will repeat a paragraph reform until the cursor reaches the end of the file. All displayed characters will be encased within those margin boundaries you have previously established.

While we are discussing commands such as SI, SL, SR and CR, a thought comes to mind. How does the new user of The Editor know when a number is placed before or after a command? He/She can look up the command in the manual which provides examples of all of the Editor commands. Or He/She can PRESS the combination of SHIFT-F1 or F6 and the second help screen will appear on your monitor.

Please note that the commands which do not have a single or double asterisk or a single asterisk and a question mark following a command will work properly when a number is required and is placed before the command, such as 37CR.

- * Number must follow the command; ** String must follow the command;
- *? String is optional

Use your the EDT_Help files - they are just a key stroke away when they are needed!

The BASIC FILE Commands as displayed in the EDT_HELP screen, page 2.

This concludes Section Three of these series. I am sure that there are many Editor users out there who can do many things with The Editor that are not outlined within the user's manual which would be beneficial to readers of IQLR. I would be more than willing to continue on with the tutorial after Section Four is completed if you are willing to send in your favorite use for this

Small Movement cmds	Big Movement cmds	Find/Exchange cmds
H Next line	T Top of file	F Find string *?
P Prior line	B Bottom of file	E Exchange strings *?
CR One char right	L Last cmd point	Qualifiers....
CL One char left	CB Bottom of file	B Search backwards
CS Start of line	CC Go to char *	U Match string is word
CE End of line	CL Go to line *	Q Query before exchange
CB Start of Block	CP Go to page *	C Text Case is significant
CK End of Block	GPB Go to prior page	+ = AND - = OR
CU Word right	GPS Go to soft page	< = begin > = end
CM Marker point	GT Top of file	
CP Start of parag	NL Next longer *	File cmds
Block cmds	NS Next shorter *	R Read text from device **
BT Type Char, Kol, Line		RD Read document file **
BH Hide / Show		RU Read unformatted file **
BS Mark start		RC Read commands file **
BE Mark end		U Write text to device **
BI Insert after		UP Write text to printer**
BD Delete Block	Quit cmds	UR Write text to device **
BM Move Block	Q Quit w/out save	BU Write block to device **
BU Write Block **	X Quit with save	AF Append from device **
* = Number must follow ** = String must follow *? = String is optional		
Line: 24 Col: 84 Line count: 24 Mode: Insert		

EDITOR S/E - (CONT'D)

program and I will insure that your submissions would be published and you will receive full credit for your contribution. Please, let us hear from you!

Section Four will discuss using two Editors on the screen at one time, setting up ALT-Key combinations for many commands which we use and an assortment of command usage. I will illustrate how to print diskette labels within Editor and highlighting diskette labels with printer graphics by accessing the printer's graphics character set.

Readers can write to me directly at the following address: Robert Gilder, 69 Jefferson Place, Massapequa, NY 11758, USA or if you wish to call by telephone: 516-541-2271.

MINI- EDITORIAL

Newport, Rhode Island, USA - The Editorial Staff

It's that time of year again, this issue marks the completion of Volume III, on to Volume IV with more enthusiasm than we had when we launched Volume I. With all the shows taking place this year (including MIRACLE in NEWPORT II), with the release of MAJOR new hardware items

and the promise of many, many, MAJOR new software releases no wonder we're so enthusiastic.



We've been asked "why the absence of an Editorial in the past few issues" ? Simply put, when we changed formats we added a number of new features that covered most of the ground we formally covered in our Editorials, thus eliminating its need. We will however, from time to time, print an Editorial when the situation warrants it, as we believe the information below does.

As can be noted on page 2 of this issue, IQLR now has a European office which we hope will make life a little easier for our UK and European readers. At the same time we have opened an account with one of the UK's leading banks, allowing our UK and European readers the option to RENEW or SUBSCRIBE by making payment in Pounds Sterling (£) either by Postal, Euro, Bank or Personal Cheque.

WORDS of THANKS - A personal word of thanks to Stuart Honeyball of Miracle Systems who has acted as our agent in the UK and Europe for the past 8 months, and may we add that Stuart undertook this task with NO financial gain or interest at all, just his belief that IQLR was good for the QL community. Sorry it took so long Stuart, but they tell me that setting up a trans-atlantic operation like this takes time. To you, goes our heartfelt thanks and gratitude.

A WORD of APOLOGY - We take great pride in the fact that "we have never been late with an issue nor have we ever missed an issue". It is our policy to ship all issues before the 10th of the first issue month of the magazine. Well, last issue this was really stretched to the limit for some of our European and all our UK readers. We mailed on time, it seems that the UK postal and or customs authorities held up our shipment for between 10 days and two weeks. We guess they couldn't believe that a publication for a Sinclair computer was coming from North America. We are sorry for any inconvenience this might have caused our affected readers.

LIGHTNING SPECIAL EDITION

If you are using a QL in any shape or form or with any accessory (including the new Super Gold Card, QXL, Gold Card, Trump Card, ST/QL, Thor, PC CONQUEROR, Minerva, TURBO, and even the humble unexpanded microdrive-only QL), you really should be using LIGHTNING SPECIAL EDITION. If not, you are very severely and unnecessarily (the program is cheap) slugging your system's performance. The superb LIGHTNING SPECIAL EDITION is capable of both automatically and very significantly accelerating almost every aspect of QL operation - whatever it is you use the QL for. **"More than 10x is achievable and 2x-4x is typical"** (quoted from page 24 of review in April '90 QL World). The speedup ratio is virtually independent of the system. However fast or slow is your QL hardware, LIGHTNING SPECIAL EDITION will accelerate it much further. All recent versions of our software are carefully optimised for 16/32-bit processors, without compromising 8-bit working. The program has not got any adverse side effects at all, and it fixes certain malevolent (i.e. lock-up or corruption inducing) anomalies. Installing it is a fast, once-only operation that takes two or three minutes and which assumes & requires absolutely no knowledge of programming or of anything even remotely technical about the QL: you are simply asked whether you wish to speed up text, maths and graphics individually, or everything. Unless you have a very good reason, opt for everything! Then LIGHTNING SPECIAL EDITION copies itself onto your boot-up disks, instantly modifying their BOOT files. Now every time you start up, full throughput acceleration is automatically invoked and everything goes much smoother and faster. In case you think that this is too good to be true, we quote verbatim the concluding para of the Sinclair QL World review: **"I could not fault Lightning Special Edition on anything. It is a clear winner and a best buy at £49.95"**. The program includes a bundle of accessories (e.g. change screen attributes including character sizes, colours and fonts in other programs - even in Quill, smooth scrolling and much more) and tweaks (vary maths and/or graphics precision, a null device, a drain and much more). Stop reading the manual where we tell you to - at around page four - if simple use is all that you want. The program also includes 84 excellent small fonts for use with PERFECTION SPECIAL

EDITION, PROFESSIONAL PUBLISHER and other programs - a real bonus!

LIGHTNING SPECIAL EDITION includes both a ROM (for plugging in at the back of your QL - no screwdriver needed) and a disk (or cartridge, if that is what you specified). As some QL hardware (QXL; either Gold Card for speed reasons) is not ROM-efficient, or you might have something already plugged in (ICE, TK2 if not already on your disk interface), you should opt for the version of the program minus the ROM for just £39.95: this is the GOLD CARD VERSION. If you have two QLs, say one of them a QXL / (Super) Gold Card and one "ordinary", you should go for the full LIGHTNING SPECIAL EDITION, as you can use the ROM on the second machine. Extra ROMs cost £10 if ordered at the same time as the program, else £15.

Q1) What programs benefit from LIGHTNING SPECIAL EDITION (LNGSE), and how much? A1) All programs, including PC emulators, benefit. Perhaps our PERFECTION SPECIAL EDITION benefits most. Interestingly, the more competently an application is implemented, the greater its expected acceleration from LNGSE..... This is because all good programs contain very fast-working code: their only bottleneck is the QL ROM, in which they may end up spending a proportionately large amount of time. LNGSE cures the congestion. Q2) Why didn't DP build LNGSE into all its programs? A2) It would be very inefficient to do it that way: because of multitasking, you'd pay for the RAM-space over and over again, let alone all the wasted disk space. Also, LNGSE benefits all programs, not just our ones. Q3) Does the QL "know" it is running LNGSE? A3) No, and there is no operating overhead either. And the QL isn't "running" LNGSE in any sense of the word. In its first and only tenth of a second of life, LNGSE pages out, using a door deliberately left open by the QL's forward-thinking designer, large chunks of QDOS (AH, JM, JS, MG and all Minerva operating system variants) and replaces them with our fine-tuned supercode. The door was carefully designed so that even the most errant programmer would not abuse it. After that, the QL has no way of knowing it has been "taken over". Q4) I'm concerned about compatibility. While I've heard only good reports about LNGSE, I've read about other products being involved in conflicts with application programs. A4) Firstly, LNGSE is not a replacement for the

whole of the ROM, only for some parts. We have, therefore, not had to make ad hoc changes to any of the many good bits, in order to avoid copyright problems. As explained in 3), we are in fact using a route specifically designed into the QL to enable ROM code to be efficiently patched. Secondly, we are very pragmatic about "improvements" and bug-fixes: one man's bug is another man's feature. Of course the original ROMs had faults - but most of these are benign and well-known (DP can supply an official bug-list to customers). To fix most such bugs would be unwise, as a lot of existing software probably either takes some advantage of, or side-steps, them. If you fix the bugs, some of this software is liable to fail, perhaps in subtle ways (all the more dangerous). It is quite unproductive apportioning blame in such cases - it is irrelevant whose fault it is: if the end-user gets software problems, it is simply VERY BAD NEWS for everyone. LNGSE avoids these pitfalls by accurately emulating all harmless QL anomalies (much harder than fixing them - we have to foresee all outcomes of the oddities). To give but one example, the QL's line-drawing routine often draws lines the wrong length (>1 pixel out). LNGSE could easily fix this (in fact, LNGSE provides a software switch to opt for correcting) but we default to emulating this anomalous behaviour. If we did not, many grid-drawing programs would end up producing odd-looking results, as their authors have understandably had to set line lengths "wrong" in order to get the right length on-screen. Consequently, LNGSE is - yes - fully compatible with everything. Q5) Is LNGSE a compiler? A5) No - TURBO is. Naturally, LNGSE greatly improves the performance of compiled programs, and by a better than multiplicative ratio (the reason for this mathematical effect is given at the back of the LNGSE manual). As most commercial software is compiled, you are the beneficiary! Q6) Why is LNGSE so cheap? A6) The truth is, we know that once you have experienced LIGHTNING SPECIAL EDITION, you won't abandon your QL. As THE QL software publisher, that is rather good news for us. Q7) One more reason for buying LNGSE? A7) Look at our SPECIAL DEALS, and think. SPECIAL DEALS can allow you to get additional programs for free, even to get us pay you to buy them! Hint: Combine cheap and dearer programs.

BUY LIGHTNING SPECIAL EDITION NOW!

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KEY: a=Available either on cartridge or disk; b=Disk only; c=Minimum 512K exp. disk only; d=Minimum 256K exp. either cartridge or disk; e=Minimum 256K exp. disk only; s=Cartridge only; g=Minimum 1.5Mb RAM; disk only disk; h=ROM + (cartridge or disk)

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System →	Bare	TRUMP	GOLD	SUPER
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Relative Speed	1x	1.8x	7x	25x!
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Clock Frequency	7.5MHz	7.5MHz	16MHz	24MHz
Bus width	8 bit	8 bit	16 bit	32 bit
RAM fitted	128Kb	896Kb	1,920Kb	3,968Kb
RAM access speed	Slow	OK	Fast	Twice as fast
PCB population	V.high	High	V.low	V.low
Physical dimensions	Monolith	Full-size	Half-size	Half-size
Lock-up frequency	Ouch!	Occasional	V.rare	Won't
Battery Backup Clock	No	No	Yes	Yes
Clock Protection level	N/A	N/A	Modest	High
Toolkit II + Manual	No	Yes (early vns)	Yes	Enlarged
Sub-directory support	No	No	Yes	Yes
Parallel/Centronics port	No	No	No	Yes
Spooler/ScreenDump/Ramdisks	No	Yes	Yes	Yes
Speedup switch (Screen#2)	No	No	No	Yes
Future hi-res graphics	No	No	No	Planned
Disk drives supported	N/A	SD/DD	SD/DD/HD/ED	SD/DD/HD/ED
Max no. of disk drives	0	2	3	4
Max sectors/disk	N/A	1,440	6,400	6,400
Max disk transfer rate	N/A	30Kb/sec	120Kb/sec	>120Kb/sec
Peripheral card tolerance	OK	No	No	OK
SCSI-2 compatibility to-be	No	?	No	Yes
Miracle/DP Warranty	No	No	2 years	2 years
DIY/Kit incorporability	Yes	No	No	Yes
Overall Rating by DP	2%	10%	30%	110%

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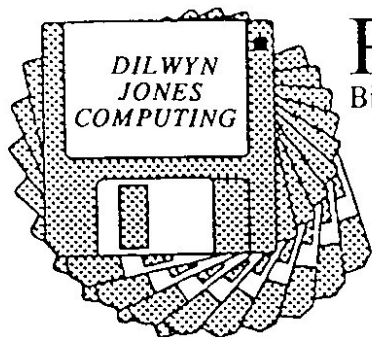
Post to: DIGITAL PRECISION, 222 The Avenue, London E4 9SE, UK or phone on 081-527 5493 from UK, +44 81-527 5493 rest of the world Name: _____ Address: _____

Products ordered: _____

on mdv/71 3.25" disk* (no. of sectors on disk-format = 340/720/1440/1800/6400*, if 5.25"/720, specify 40/80* track) **delete as needed

Signature: _____ Amount: £ _____

Card No: _____ Expiry date: _____



REVIEW OF QINDEX

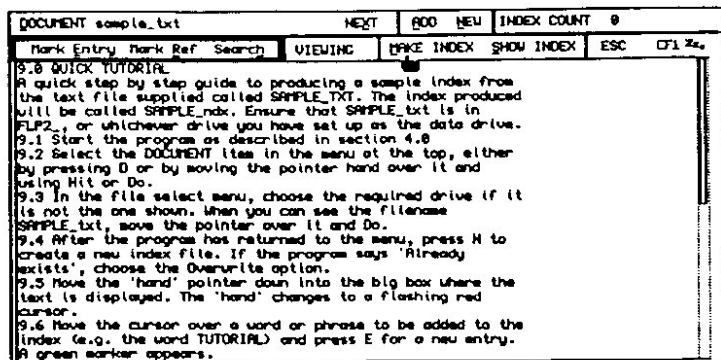
Billerica, Massachusetts, USA - Gary Norton

QINDEX, as the name applies is an indexing program. It will produce an index from either a Quill file or from an ASCII text file. Since I do not own Text 87 or Perfection, I cannot comment on its compatibility with their files. However, if neither of these type files work, you can always save them as a text file.

QINDEX requires TKII, is Gold Card and Minerva compatible and runs in the pointer environment. The disk comes with two programs, QINDEX_OBJ, for those with the pointer environment (PE) already running, and QINDEX_EXE for those without.

For those not familiar with the PE, I will explain step-by-step the process required. Those of you that have used the PE please bear with me. Once loaded, the top of the screen contains a command bar, with a hand pointed to the Document box. At this point your only choices are to select a document for use, exit the program, or put the program to sleep. To load a quill or text document, with the hand in the Document box, press your mouse button, joystick firing button, or Enter key. Press F2. In the Directory box, select either MDV or FLP then 1 through 8 for the drive. Next, select the Data Default and do the same. Select OK. NOTE:

I've been unable to change the data default from MDV2. I'm not sure if this is a bug in the program or the user. It allows me to make the change, but when I select NEW (see below), it defaults back to MDV2. The files on the selected drive appear below. Select the one to be used. I've selected the Sample.txt file provided on the QINDEX disk. To load, select the OK box.



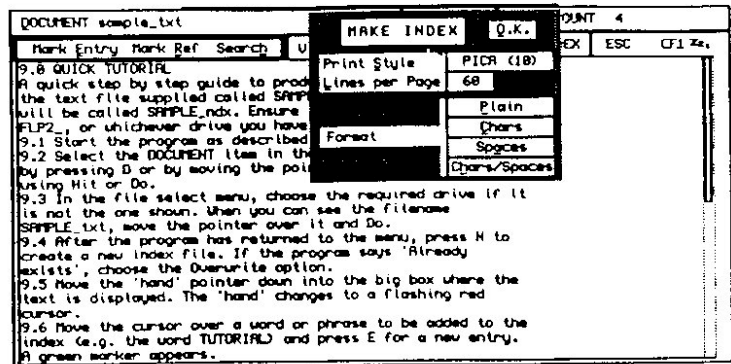
The maximum number of lines allowed in the file to be indexed is 1,024 lines. Once loaded, the file is processed and the details of the lines produced are loaded in a reserved area of memory; the size determined by the number of lines. If there is insufficient memory to hold the number of lines, your options are to quit, select another file, or change the number of lines to be allowed. Next, select whether you will be adding to an existing index or starting a new one.

Once you make your selection, move the pointer into the text area. The pointer cursor becomes a Quill-type cursor. Move the cursor to the first character of the text to be indexed. Use the TAB, shift-TAB, up and down arrows, and shift up and down arrows to move the cursor. Once in place, press E. Move the cursor over the text to become an index entry; the text becomes highlighted. With the area highlighted, press enter. The text is now stored in the index file. When you have finished marking the text to have the same reference, press R. This text is indexed under the reference name. Continue through the file. At any time, press H, and you have search mode.

QINDEX - (CONT'D)

When you have completed your indexing, press M or select **MAKE INDEX**. This makes the index. You select font size, lines per page, and format. Once all selections are made, select OK and the index file is created. If Pica or Elite fonts were selected, the index display will be in one column. Any other font and the display is printed in two columns.

The program's presentation and function is very impressive. Even without a mouse, the PE eases a program's operation. As mentioned earlier, you can use a mouse (preferred method), the keyboard, or a joystick to move around the screen. Even if the user has never seen a pointer environment screen, they would have little trouble navigating around this program. I especially like that the PE is included on the program disk.



As for QINDEX itself, if someone writes articles or other papers, this is a very easy way to index the article. The maximum number of lines, equal to about sixteen pages, could be a drawback. The inability to change the data default is also problematic. To me, the biggest drawback is each index entry cannot be longer than twenty characters. In my experimenting with the supplied text file, when I attempted to select more than the 20 characters, I was knocked out of the program and had to reboot. However, once familiar with the program, you are able to deal with these and do some serious indexing. For someone with this need, I know of no other program that will allow you to index a file, using its own text. QINDEX is surely worthy of your consideration.

CORRECTION !!

Bangor, Gwynedd, GREAT BRITAIN - Dilwyn Jones

In Volume 3 Issue 4 there were errors in the listing due to having the attribute conditions accidentally inverted (i.e. testing for 1 instead of 0). Here are the lines to correct on page 65:

```
1000      IF bold % = 0 THEN
1070      IF underline % = 0 THEN
1140      IF low % = 0 THEN
1210      IF high % = 0 THEN
```

Similar corrections need to be made to the C version, but I don't know enough C to list the changes. It looks as though similar changes need to be made on the tests on "bold", "uline", "low" and "high" on pages 70 and 71.

SPREADSHEETS / DESKJET 500

Trafford, Alabama, USA - Bob Madaris

Having recently taken advantage of what I think is a good price on the HP DESKJET 500 printer (\$299.00 at OFFICE MAX), I then had the task of changing the printer drivers for the Psion software that I use with it. One of the many features of this printer is the option of

SPREADSHEETS/DESKJET 500 - (CONT'D)

selecting landscape (sideways) printing. This caused me to think of the possibilities of printing large spreadsheets with this option of the printer. After studying the printer control codes in the owners manual, I came up with a print driver for Abacus that prints the spreadsheet across the length of the paper. I also devised a translate to print in double height, as this printer supports this in landscape mode. All of the following will be correct only if the Mode function switches on the printer are down.

Run the Psion install_has program , use down arrow key to OTHER, then press F2 to edit the driver. Edit the driver as follows:

DRIVER NAME	:DESKJET_aba	Remark: or a name you want.
PORT	:ser1	Remark: or whatever port you use.
Baud RATE	:9600	
PARITY	:NONE	
LINES/PAGE	:45	
CHARACTERS/LINE	:172	
CONTINUOUS FORMS	:NO	
END OF LINE CODE	:CR,LF	
PREAMBLE CODE	:ESC,E,ESC,&,1,1,O	Remark: 27,69,27,38,108,49,79
POSTAMBLE CODE	:ESC,E	Remark: 27,69
BOLD ON	:NONE	
BOLD OFF	:NONE	
UNDERLINE ON	:NONE	
UNDERLINE OFF	:NONE	
SUBSCRIPT ON	:NONE	
SUBSCRIPT OFF	:NONE	
SUPERSCRIP ON	:NONE	
SUPERSCRIP OFF	:NONE	
TRANSLATE1	:£,ESC,(,1,E,#,ESC,(,0,N	
TRANSLATE2	:Ö,ESC,(,s,2,4,V	
TRANSLATE3	:Ö,ESC	

Remarks on the above: The preamble code puts the printer in Landscape Print mode. The postamble puts it back in Portrait mode (resets printer). Translate1 causes the printer to properly print the U. K. pound monetary symbol. The first character in translate2 is Control Shift D [CHR\$(164)]. When this character is embedded at the start of the spreadsheet, it will cause 24 point (double height) printing. Caution: The lines per page and characters per line will not be right for this. It should only be used on small spreadsheets. Also the Design command in Abacus should be used to set Gaps between lines to 1 if you are to use translate2. [F3 , (D)esign in ABACUS].

TRANSLATE3 [Ctrl Shift E] is used to send the ESCape sequence to the printer. The PSION printer driver does not allow you to send this character from your document. The Lines/Page and Characters/Line in this driver is set to use the Courier 16.67 typeface of the printer. This is where we use Translate3. At the start of the spreadsheet , in TEXT mode type the following: Ö(s16.67H (the first character is CTRL SHIFT E). This sends the ESCape sequence to the printer to select the 16.67 cpi type. With this print you can get two screens

wide by two screens deep on a sheet of paper. With the grid sizes normal (10), You can print columns A1:N45 on one sheet of paper. If you wanted to, you could then put the paper back in and print the rest of your spreadsheet on the back.

SPREADSHEETS/DESKJET 500 - (CONT'D)

Translate3 can be used to select many of the features of this printer. If, for instance, you want to have the Title of the spreadsheet printed in **Bold** type, do as follows: Just before the Title, in TEXT mode type `Ô(s3B`. Then after the Title type `Ô(s0B`. As you can see you could use Translate3 to embed codes to use *Italics* in your spreadsheet to emphasize certain items. Look up the code in the owners manual for the printer's feature that you want to use and then embed them in your spreadsheet. Use Ctrl Shift E for the ESCape code so that the print driver will send the ESCape code to the printer and then follow that with the rest of the code.

The Landscape mode of printing on the DESKJET 500 is only available on the Courier typeface. This is the default when it is turned on, but if you have changed it to another typeface, you will need to put it back to Courier before trying to print with this print driver. The LINES/PAGE and CHARACTERS/LINE for this print driver are based on U.S. Letter paper size at 6 lines per inch and 16.67 cpi (Courier 16.67). Refer to the DeskJet 500 owners manual for using European A4 or U.S. Legal paper. There is a chart in the manual showing this information (page 5.5). You can use Courier 10 cpi and change the CHARACTERS/LINE to 103. Courier 20 would need this changed to 206. The 24 point (double height) option is available on all three of these pitches (use TRANSLATE2).

It is important to remember to use the Design Command in Abacus to change the lines per page and the characters per line to the settings above.

As letter quality is not usually required for this type printout, you could select draft mode on the printer. I use the XCHANGE program for the 4 PSION programs and have created several different print drivers for Abacus and Quill. I can easily access them by using the BACKUP command in XCHANGE to overwrite xchange.dat with any of the different drivers that I have copied to the disk. If you do not use XCHANGE, you can do this same thing with Printer.dat. If you do not use XCHANGE, why not ??? It is Public Domain. I find it to have really revitalized my interest in the PSION 4. I use them more now than ever before and even though I have Text87plus4, I still do a lot work in Quill.

One thing that I had never seen before when using the Psion programs was the Command Line Prompt "NEW SHEET OF PAPER AND PRESS ENTER". I had always used continuous form paper. When this is set to NO in the print driver, then you will get this prompt for each page to be printed. This allows you to insert the same sheet (printed side up) and print the other side by pressing ENTER.

I will share the drivers that I have developed for the DeskJet 500 printer for Quill in a follow up article in the near future (next issue ?). Archive programs very easily sends to the printer any printer command that you want to with the Lprint Command and CHR(). With the numerous box and line drawing features that are standard in this printer's character sets, there are huge possibilities for printing out databases with boxed fields, etc. Alas, I do not guess that I would ever master replacing Gprint_prt for the Easel program to print to this printer. I will have to use a work-a-round like Simon Goodwin's HPDUMP in QL WORLD.

If you have any questions on this, please send a SASE.

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Trafford, AL 35172
USA

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News: lower prices ...

Hello all. The main changes are the price of our programs. They are now all inclusive (p&p, bank charges) and they are shown in 3 different currency. So your work is now much easier. USD prices include airmail postage to the States. Prices are lower due to different conversion rates (ITL is very low now). We have now bought a laser printer, so the quality of the manuals is now much better. Most of them have been revised and step by step tutorials have been added. As you can see this is a rather special advert (created with Plus 4 & Linedesign on a QXL): Refer to the other issues of IQLR for detailed program specifications. It is now time to tell existing users how to upgrade programs and/or manuals. If your manual is not laser-printed we advise you to get a new one. The upgrade prices given below comprise p&p, the new manual and 3.5" disk(s) with the latest version of the program(s).

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ZM/128 plus 1 is a new major release of our clever Spectrum 48k/128k emulator. It has been improved to run happily with Minerva double screen or 68030 (QVME) and 68040 (QXL) systems. You can now run it with any screen resolution (QL, EGA, VGA). ZM/128 automatically selects its internal routine to get the best performance from your system. On a QXL you will usually get >100% ZX speed but ZM/128+ still remains the only Spectrum 128k emulator usable on a Gold Card QL. As an added bonus, if you use the Ext.Env.,

you can now switch to other task without the need to return to the supervisor. ZM/128+ still offers you the unique feature of 3 channel soundchip emulation. You can get ZM/128+ free if you get the ZM/x or the ZM/hT system. Registered users can get it with the new 90 pages manual which costs only 6 GBP or 10 USD.

DEA intelligent disassembler +3

This is the cheapest disassembler available for QDOS-SMSQ, but it is also powerful. Plus 3 is interactive and the latest v5.21 is now full QXL compatible. If you own a pre-5.20 release you MUST ABSOLUTELY upgrade: it will cost you (with new manual) only 7 USD or 4 GBP.

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MasterBasic: "Elegant and useful" (S.Goodwin QLW 4/93) "Easy to use and well thought out, even the more casual SB programmer should get a lot of use out of it" (R.Mellor QLW 6/92) **DEA** "This program is certainly the most versatile machine code programming utility I have seen on any computer to date" (QLW 4/92) **ZX Emulator** "really spectacular... well worth the price" (E.Forenzi on IQLR vol3/1) "ZM/hT is very fast... well worth the extra cost.. an incredible feat of computer science" (S.Goodwin QLW 4/93) "awesome... even an 8 bit QL can run ZX software at reasonable speed ... most sophisticated..." (Last issue of Your Sinclair!).

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USD: United States Dollar GBP: Great Britain Pound DEM: Deutsche Mark

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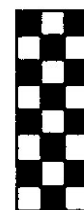
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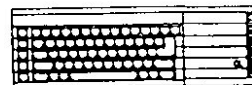
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QL ABACUS <--> MSDOS LOTUS

SPREADSHEET DATA TRANSFER

Pylesville, Maryland USA - Thomas Robbins

ERRATA from the previous articles in this series: On page 21 Vol.3/Issue 3 of IQLR "QL/Archive to PC DBase", I inadvertently gave the command for the example file to be appended into DBase as 'APPENDFROM GAZET EXP DELIM'. It should read 'APPEND FROM GAZET.EXP DELIM'.



FILE TRANSFERS



In giving my address in the second article for any one who would like to obtain a copy of XCHANGE, I gave my Post Code/Zip Code as 21237. It is actually 21132.

Welcome to part 3 of the QL <--> MSDOS applications data transfer series. In this section, we will examine the transfer of data from QL Abacus/XCHANGE to MSDOS Lotus. This transfer is of spreadsheet data (both entered and calculated) only. Cell formulas are not transferred, but the result calculated by the formula is.

Transfer of Abacus to Lotus is actually quite simple if a few basic steps are taken. The export file structure consists of a series of records each terminated by <CR>(ASCII code 13) and <LF>(ASCII code 10), with the end of the file marked by CTRL Z(ASCII code 26).

Each record consists of a series of values separated by commas. The values are either text (which must be enclosed in quotes) or numbers. The first value in each record must be text and if its name ends with a dollar sign (\$), all the following values must be text.

Consider the ABACUS spreadsheet fragment below:

	A	B	C	D	E	F	G	H
1	First	Last	Travel	Food	Misc.	Total	PCT	MISC
2	Beth	Read	350	85	30	465	6.45 %	
3	Mary	Milton	1400	300	80	1780	4.49 %	
4	Stuart	Kipling	850	200	35	1085	3.23 %	
5	Tracy	Rose	1250	260	55	1565	3.51 %	
6	James	Wilson	650	120	40	810	4.94 %	

Below is an export file created by the following series of commands:

KEY IN Function

F3	go to the command mode
F	Select files commands
E	Export
A	Selects Abacus/Archive comma delimited format
A1:H6	Selects the range to be exported
ENTER	Confirms range
C	Selects export by columns
FLP2_SAMPLE	Device/drive and file name to store the file on The file name - note: the extension _exp will be added automatically by Abacus

ABACUS/LOTUS - (CONT'D)

Important note: There can be no blank lines between the column heading and the beginning of the column data. The data to be exported must follow the column heading. You may have to do the export in segments to avoid this if you have a spreadsheet with a lot of sections with titles and fancy layout headings.

It is essential that the first row of the range to be exported contain the column name and the second row contain the data to be exported. If your spreadsheet has blank columns between data columns, and you wish to retain these blank columns in Lotus, put a 'dummy' column heading in these columns. This maintains your original column setting in the Lotus file when transferred.

Notice the column headings. Any heading for a column with text data has a '\$' appended by the export function. Columns with "illegal" characters in the heading (., +, % or a space etc) have the column identifier (COLE for column E) as the heading. Calculated fields and formatted fields have the unformatted values in the export file - COLUMN G is "percent misc." and is misc/total. In Abacus, I have formatted this column as percent, but in the export file it comes out as a decimal. Below is the export file that has been created.

```
"First$","Last$","Travel","Food","COLE","Total","COLG"
"Beth","Read",350,85,30,465,0.064516129032258
"Mary","Milton",1400,300,80,1780,0.044943820224719
"Stuart","Kipling",850,200,35,1085,0.032258064516129
"Tracy","Rose",1250,260,55,1565,0.035143769968051
"James","Wilson",650,120,40,810,0.049382716049382
```

Once you have exported the data to a file, you must transfer the file to an MSDOS formatted disk. There are a number of programs available to accomplish this, including several in the Quanta Library. Execute Lotus 123 on the MSDOS P.C. From the main menu:

KEY IN	Function
/	go to the command mode - equivalent to F3 in ABACUS
F	Select files commands - the same as ABACUS
I	Select Import sub command - the same as ABACUS
N	NUMBERS - Parse each line imported into numbers and text
a:\MYFILE.EXP	Drive and name of file to be imported
ENTER	Do it

A1: "First\$

READY

	A	B	C	D	E	F	G	H
1	First\$	Last\$	Travel	Food	COLE	Total	COLG	
2	Beth	Read	350	85	30	465	0.064516	
3	Mary	Milton	1400	300	80	1780	0.044943	
4	Stuart	Kipling	850	200	35	1085	0.032258	
5	Tracy	Rose	1250	260	55	1565	0.035143	
6	James	Wilson	650	120	40	810	0.049382	
7								
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ABACUS/LOTUS - (CONT'D)

What you now have in Lotus is your ABACUS spreadsheet data, At the bottom of the preceding page is a screen dump from the P.C.

Note that the last column, which was a 'calculated' column in ABACUS, contains the calculation results. I had set ABACUS up to format numbers as percent - F3 Units Cells Percent 2 decimal places- but the exported file contains the unrounded values.

All that remains is for minor formatting and dressing up of the Lotus spreadsheet. You may want to change column widths, restore formatting (ie. integer, percent or whatever) and change column headings to get rid of the "\$".

ALT(ernatives)

Pylesville, Maryland, USA - Thomas Robbins

ANOTHER WAY TO INDEX QUILL DOCUMENTS

I enjoyed Bill Cable's recent article on using Windex to index a long Quill document. Every time I follow one of Bill's programs, it acts as a tutorial on Archive programming.

There is another way to get to the same place. The Quanta Library contains a program called Indexer by H. Miall on disc PSION_1. This is an indexing program for Quill doc's. You define a list of words or word groups and the program builds the index for you. The program has a good documentation file and an easy to follow example.

ANOTHER WAY TO PRODUCE ASCII TEXT FROM A QUILL DOCUMENT

Dilwyn Jones' recent program "STRIPPER" also reminded me that there are often several ways to do the same job. I have also had the need to produce an ASCII text file from a Quill document, but my approach was to modify the Quill printer driver using install_bas. If you set the preamble, bold, underline, superscript and subscript to none in the printer driver, you can print straight text to a file. Each line ends with a CR/LF and tabs are replaced with spaces. Alternatively, if you have Xchange (and if not, why not) you can use the files/export command in Xchange Quill. To produce "streaming ASCII", set the end of line code to a space.

ANOTHER WAY TO COPY A DISK

MSDOS 6.0 (Oh the shame in mentioning MSDOS!) has a new form of the diskcopy command. It makes a mirror of the disk as one long file onto the hard drive and then copies it to another floppy. It will do this for QDOS formatted disks as well as MSDOS disks.

THE QL AND WINDOWS

At work, I have a 486 MSDOS computer with Windows. I recently tried to install a spreadsheet program (Quatro Pro 5.0) on it. I could not install it, as the computer had "only" 2 megabytes of ram ! My QL with Gold Card/QPAC runs faster than the MSDOS machine under windows. I'll be sticking with QDOS for most of my computing for the foreseeable future - plus it is a whole lot more fun to use.

QDOS/QL Options

Does anyone have any experience with the AMIGA QDOS emulator? I am trying to decide between the QXL, waiting for the Miracle Systems Graphic Card, the Atari Emulator, the AMIGA emulator or sticking with the Gold Card. Can anyone tell me the difference between QDOS, SMS-Q and SMS-2?

DILWYN JONES COMPUTING

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Note: To use 4Matter, you need Locksmith, but 4Matter available separately for users who already have Locksmith.
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File backup and disk labeller program.
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VISION MIXER PLUS £22.50
Enhanced version of Vision Mixer.
PICTUREMASTER £15.00
Screen design program, ideal with Vision Mixer.
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Wide range of QL clipart on 3 disks.
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2 disks of QL clipart.

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Screen dumps, banners, etc for dot matrix printers.
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Text of King James Bible, plain text or Quill .doc
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Enhanced version, not for pointer environment.
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Store addresses and print address labels in Archive.

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Family trees and family history.
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Classic naval simulation for networked QLs
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HOME BUDGET £20.00
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Task switcher utility.
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Create smart labels for your floppy disks.
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Multi column lists of files, on screen or printer.
ROB ROY PACK £10.00
Inkwell font printer, plus Cue Well.

3D TERRAIN £12.50
Three-D graphical representation of Abacus data.
RETURN TO EDEN £17.50
Role playing adventure game on 3 disks.

MAGAZINES

We now have in stock a limited number of back issues of the QL magazines formerly published by CGH Services and we can also offer individual copies of the new QL magazine 'QREVIEW'. Subscription details supplied with orders for any back issues. Individual copies of QReview (published by the editor of the other magazines described below, QReview to be launched end of June) available for £2.00 each (UK), £2.50 (Europe), or £3.50 (USA and rest of world). We can also offer attractive deals on complete sets of back issues of a magazine.

QL TECHNICAL REVIEW
A non-games review magazine, 9 issues available at £2.00 each (UK), £2.50 (Europe), £3.50 (USA and rest of world).

COMPLETE SET £12.00 (UK), £16.00 (Europe), £24.00 (USA etc).

QL ADVENTURER'S FORUM
Games based magazines, 9 issues in total available at £1.75 each (UK), £2.25 (Europe), £3.25 (USA etc).

QL LEISURE REVIEW
Games based magazines, 2 issues published available at £2.00 each (UK), £2.50 (Europe), £3.50 (USA etc)

COMPLETE SET OF BOTH GAMES MAGAZINES (11 ISSUES) £14.00 (UK), £20.00 (Europe), £30.00 (USA etc).

PLEASE NOTE: SMALL ORDERS.

IF TOTAL COST OF ORDER IS LESS THAN £5.00, ADD £1.00 TOWARDS COST OF SMALL ORDERS (BANK CHARGES ETC) OR WE WILL MAKE A LOSS ON SUCH ORDERS!

PAGE DESIGNER 3

This most delayed of all QL software of all time (I think!) is finally about to hit the streets. We were hoping to launch at the Bristol Quanta Workshop, England, 17th October 1993. PD3 is pointer driven, can be controlled by mouse or keyboard, uses Pro Publisher compatible Hires fonts, features text import, full QL screen handling, graphics menu, cut and paste, 9 pin, 24 pin and HP Deskjet printers and so on. Can be used for making posters and other general mixed text and graphics applications. It has been a long hard slog getting this program out, I hope you will feel it was worth the delay!

Page Designer 3.....£40.00
PD2 (send proof of purchase of old PD2).....£25.00

DILWYN JONES COMPUTING

41 BRO EMRYS, TAL-Y-BONT, BANGOR,
GWYNEDD, LL57 3YT, GREAT BRITAIN
FAX + TELEPHONE: (0248) 354023

QL SOFTWARE

A SELECTION FROM OUR RANGE OF NEARLY 100 PRODUCTS FOR THE QL.
NOT ENOUGH ROOM TO GIVE MUCH INFORMATION HERE HERE, SO PLEASE
ASK FOR OUR CATALOGUE (PHONE OR WRITE FOR A COPY).

SERMOUSE £40.00

A complete mouse system for the QL, to work with pointer driven programs such as QPAC2, Line Design, etc. N.B. ADD £2.50 POSTAGE!

SIDewriter £15.00

For printing wide spreadsheets or plain text file sideways using a choice of character sizes on a 9 pin or 24 pin Epson compatible dot matrix printer. Sidewriter can be pointer driven, or used without pointer environment on unexpanded QL. On disk or microdrive.

QL GENEALOGIST 3160.00

Brand new pointer driven version of the popular Genealogist program. Ask for information! Can be controlled from the keyboard or using a QIM1 or Serial Mouse. 'Pick' boxes, new 'county' field, improved dates, new 'birth brief' report, improved loading and saving times, improved searching and notes. Requires at least 512k memory, disk only. Upgrade from version 2:£33.00
Upgrade from version 1:£45.00
Upgrade from 128k version: £50.00

EASYPTR III part 1 £40.50

Simplified pointer environment programming. Part 1 consists of sprite editor, menu editor and superbasic extensions to use menus in your own programs. Requires expanded memory, available on disk only.

EASYPTR III part 2 £20.00

Consists of appendix manager and enhanced toolkit for control of menus etc in your programs.

EASYPTR III part 3 £20.00

Consists of EasySource and C library routines, etc.

QLIBERATOR £50.00

Superb superbasic compiler, compiles virtually all of basic plus most toolkit commands, etc. Produce faster multitasking code from your basic programs. Compile resident extensions, use overlays, etc with the latest V3.36. Can be mouse controlled. Expanded memory required.

BUDGET QLIBERATOR £25.00

Excellent value, compiles virtually all of superbasic. Not mouse controlled. Works on unexpanded QL.

DJTOOLKIT £10.00

Compact toolkit of BASIC extensions, ideal for use with QLiberator. Really useful programming commands, can be distributed with your compiled programs if you wish. At this price, a bargain! Suitable for unexpanded QL.

LINEDESIGN £100.00

Vector drawing package, uses outline fonts and clipart, move and resize text and graphics without loss of quality. Ideal for making posters, etc. Supplied with huge range of fonts and clipart on TEN disks! The more memory your system has, the better! Disk only, can be mouse controlled.

DATA DESIGN 3 £60.00

Superb, fast pointer driven database with free form field structures, with the option of disk based for large files if required, or smaller files can be kept in memory for speed. Expanded memory, disk only. API for Data Design £20.00
Adds programmability in BASIC, C or m/c code.

QPAC2 £39.95

Tony Tebby's superb pointer environment package. Mouse or keyboard controlled, a good introduction to pointer environment. 256k ram min. Disk only.

QPAC1 £19.95

Ideal companion to QPAC2, consists of small accessory programs. Can be used with or without QPAC2. Expanded memory required, disk only.

QTPY2 £29.95

Tony Tebby's spelling checker program. Check spelling as you type OR check existing files retrospectively.

DISA £29.00

Interactive pointer driven machine code disassembler. 256k ram min. Disk only.

MEGATOOLKIT £25.00

EPROM VERSION £40.00
Large toolkit with over 200 BASIC extensions. Many examples supplied, extensive manual.

FLIGHTDECK £15.00

QL flight simulator. Works on unexpanded QL.

DISCOVER £20.00

The painless way to move files from QL to PC and vice versa. As simple as copying files between two disks. 256k ram min., disk only.

MULTI DISCOVER £30.00

Also contains CPM, Unix CPIO, BBC micro, Spectrum and SAM Coupe file transfer capability. 256k min. ram, disk only.

TEXTIDY £15.00

Assists Discover with conversion of text files by stripping out control codes, etc. 256k ram min.

CONVERT-PCX £10.00

Used with Discover, allows transfer of bit mapped PC clipart graphics in PCX format (a common PC file format) to QL screens or Page Designer pages. Create more clipart easily for the QL! 256k ram, disk only.

QL-PC FILESERVER £24.50

Link a PC and a QL via a serial port cable and use this software to enable the two to communicate - the QL can save its files on a PC's disk systems and print to the PC's serial port using normal basic commands like COPY. Works on unexpanded QL.

BANTER £25.00

Simple to use banner maker which uses outline fonts for good quality large text. Prints sideways across up to 4 sheets of paper. Simple to use on screen preview, etc. Suits most Epson compatible printers.

IMAGE PROCESSOR 2 £15.00

Easy to use graphics system, featuring usual graphics facilities, pixel zoom editing, image enhancement, mode conversion etc. 512k, disk only.

SCREEN COMPRESSION £10.00

Reduce the amount of storage required by graphics on disk or microdrive. 256k, disk only.

SCREEN DAZZLER £15.00

Unlike the usual screen savers, which simply turn off the display when the keyboard is not used for a while, this one can activate various graphical displays, more like the screen savers on other computers. Now with extra disk of display routines! Pointer environment compatible.

SCANNED CLIPART 1 £10.00

A 3 disk set full of compressed scanned pictures (decompression program supplied of course) which can be used in most QL programs (DTP, graphics, etc). Assorted collection, containing many pictures you may not find in other collections. A bargain at this price. 128k, disk only.

PRINTERMASTER £20.00

Select printer control codes quickly and simply from a menu to set fonts, page lengths, etc before printing from programs like Quill, etc. 128k, disk/mdv

SQUIDGY ROUND THE WORLD £12.50

An arcade game, ideal for the young at heart! 128k

5-GAMES PACK £12.50

5 'thinking' games in one bargain pack. 128k

OPEN GOLF £12.50

Golf playing simulation, with choice of 50 courses each of 18 holes. 384k memory required, best used with a colour monitor. Disk only.

GRBY WOLF £12.50

Submarine warfare simulation, where you are the commander of a submarine in the Atlantic, an exercise in strategy for entertainment purposes. 384k RAM, 85 column monitor required. Disk only.

SUPPLIES

FLOPPY DISKS	£0.40
DSHD DISKS	£0.70
MICRODRIVES	£2.50
DISK LABELS	£2.00
On printer roll	£2.50
ADDRESS LABELS	£2.00
MDV LABELS	£2.00
MOUSE MATS	£2.50
Disk box dividers	£3.00
in stock once more!	

TERMS: Discounts - buy 2 programs, claim 5% off each, buy 3 or more, claim 10% off each program. Offer applies to software only. POSTAGE - Software is sent post free to UK addresses. Overseas please add £1.00 per program for postage (maximum £3.00). Floppy disks and serial mouse - add postage of £2.50. Labels/mouse mats - add postage of £0.50 per item if only buying these. PAYMENT - in UK currency (pounds sterling) only please. Payment by cheque, Eurocheque, Postal Order, cash (send by registered post), or by credit card (Visa/ Access/ Mastercard/ Eurocard/ Connect). In case of difficulty contact us first to arrange a payment method if none of these is possible for you. Please make cheques, etc payable to DILWYN JONES COMPUTING (not to any other name or abbreviation please, our bank prefers it that way!). If total order value is less than £5.00, add £1.00 to total or we'll make a loss due to high bank charges.

ACCESSING PRINTER_DAT

Bangor, Gwynedd, GREAT BRITAIN - Dilwyn Jones

This article sets out to explain the file structure of the PRINTER_DAT printer driver used by Quill, Archive and Abacus. A program is presented which prints to the screen all of the codes used in the driver and in so doing, shows how you can access the driver for use in your own programs, for example, or to write an alternative printer driver editor. The program listed works with the Xchange versions of these printer drivers too, since the file format appears to be the same.

The program listed uses no toolkit commands, it should work on all versions of the QL. If you have toolkit 2 or other basic extensions toolkit, it should be possible to rewrite the program to use some extensions such as string and byte fetching extensions to greatly simplify the program.

First, I shall explain the file format used. It was quite tricky to work out the file format and I hope I got it right since I do not have formal documentation on Quill.

4 bytes "prt1"	characters used to identify printer driver
1 byte	total of lengths of code strings below, but if length bytes are 255, this value is not added to this byte
10 bytes	driver name, which is always 10 characters long, filled with extra spaces to make it 10 characters
1 byte	port type
if port type = 1 or 2: ser1 or ser2 respectively	
1 byte	parity code (0=none,1=space,2=mark,3=odd,4=even)
1 word	baudrate, stored as 2 byte integer, MSB first
15 bytes	spaces to pad to file position 34
if port type = 0: parallel or other non-serial port	
1 byte	length of name of printer port (e.g. 3 for PAR)
x bytes	spaces to pad out to file position 34, where x is 17-(length of name of printer port)
1 byte	number of lines per page
1 byte	number of characters per line
1 byte	forms type, 1 for continuous, 0 for cut sheets
4 bytes	appear to be spare, filled with spaces or nulls.

The following data all consist of strings containing codes for various printer functions. The format is unusual in that the string consists of one byte for the length of the string rather than 2 bytes normally used on the QL. If the length byte is 0 or 255 (hex FF), there are no other codes. 0 appears to represent NO CODES, or NONE as it appears in INSTALL_BAS. 255 appears to represent an inbuilt default value.

string	end of line codes
string	preamble codes
string	postamble codes
string	bold on codes

ACCESSING PRINTER_DAT - (CONT'D)

string	bold off codes
string	underline on codes
string	underline off codes
string	subscript on codes
string	subscript off codes
string	superscript on codes
string	superscript off codes

Next comes the translate character strings. The format of the strings is the same (byte for length, followed by that number of codes). The first character after the length byte is the character code translated from, and the remainder of the characters indicate what that first character is translated to.

10 strings translate 1 to 10

1 byte usually a linefeed code.

Note that the strings are in an unusual format. One byte indicates how many characters to follow in that string. If that length byte is 0 it means 'no codes for this function'. If the length byte is 255 it means use an inbuilt default value, used for only a few cases. This does not get added to the 'total of lengths of code string' byte.

That lot was a bit of a mouthful. Now for the easy bit, the program to decode it all. I cannot guarantee this will work on every printer_dat and xchange_dat file, but it seems to work for the ones I have tried with it. It asks for the filename of the printer driver file (if you just press ENTER it uses the default of 'printer_dat' on FLP1). It reads it and then prints it to the screen. Since there is a long list to print, it might scroll off the screen. To pause it to view the first half, press CTRL F5 to freeze the screen momentarily.

You can use similar techniques to read printer_dat files for your own programs. The data ends up in strings in this program and by reading the codes into strings in your programs, you can simply send the codes to the printer with a PRINT statement when required. For example, "PRINT #printer_channel,bold_on\$;" to turn bold printing on.

HINT: The Psion programs allow you to specify a parallel printer port in place of the usual SER1 or SER2. This program will print that out, of course. But some versions of the Psion programs seem to have difficulty with the name PAR - they require this to be entered as 2PAR for some reason, I don't know why the number TWO is required before the name. Of course, if you use serial ports, you will not care (and not know) about this.

100 REMark PRINTER_DAT reader by Dilwyn Jones 1994

110 CLS : CLS #0

120 INPUT #0,'Enter name of printer driver (default PRINTER_DAT):'; driver\$

130 IF driver\$ = "" : driver\$ = 'FLP1_PRINTER_DAT'

140 OPEN IN #3,driver\$

150 ident\$ = ' ': REMark 4 spaces

160 FOR a = 1 TO 4 : ident\$(a) = INKEY\$(#3)

170 IF ident\$ <> 'prt1' : PRINT #0,'Unsuitable file' : STOP

180 code_strings_length = CODE(INKEY\$(#3))

190 driver_name\$ = FILL\$(' ',10)

ACCESSING PRINTER_DAT - (CONT'D)

```
200 FOR a = 1 TO 10 : driver_name$(a) = INKEY$(#3)
210 PRINT'DRIVER NAME      :';driver_name$
220 :
230 REMark get port details
240 port_type = CODE(INKEY$(#3))
250 IF port_type = 1 OR port_type = 2 THEN
260  REMark serial port
270  PRINT'PRINTER PORT      : SER';port_type
280  parity = CODE(INKEY$(#3)) : PRINT'PARITY      :';
290  SElect ON parity
300    =0:PRINT'NONE'
310    =1:PRINT'SPACE'
320    =2:PRINT'MARK'
330    =3:PRINT'ODD'
340    =4:PRINT'EVEN'
350  END SElect
360  baudrate = 256*CODE(INKEY$(#3))+CODE(INKEY$(#3))
370  PRINT'BAUDRATE      :';baudrate
380  FOR a = 1 TO 15 : temp$ = INKEY$(#3) : REMark skip the spaces
390 ELSE
400  REMark parallel or other type of port
410  PRINT'PRINTER PORT      :';
420  portlen=CODE(INKEY$(#3)) : REMark name of port
430  FOR a = 1 TO portlen : PRINT INKEY$(#3);
440  PRINT
450  FOR a = 1 TO 17-portlen : temp$ = INKEY$(#3) : REMark skip spaces
460 END IF
470 lines_per_page = CODE(INKEY$(#3))
480 PRINT'LINES PER PAGE      :';lines_per_page
490 chars_per_line = CODE(INKEY$(#3))
500 PRINT'CHARACTERS PER LINE :';chars_per_line
510 forms_type = CODE(INKEY$(#3))
520 PRINT'FORMS TYPE      :';
530 IF forms_type = 1 THEN
540  PRINT'Continuous'
550 ELSE
560  PRINT'Cut'
570 END IF
580 FOR a = 1 TO 4 : temp$ = INKEY$(#3) : REMark skip spaces
590 :
600 REMark read code strings for end of line, pre/postamble, bold etc
610 PRINT'END OF LINE CODE      :';
620 eol$ = FETCH_CODE_STRING$ : CODE_STRING eol$
630 PRINT'PREAMBLE CODES      :';
640 preamble$ = FETCH_CODE_STRING$ : CODE_STRING preamble$
650 PRINT'POSTAMBLE CODES      :';
660 postamble$ = FETCH_CODE_STRING$ : CODE_STRING postamble$
670 PRINT'BOLD ON CODES      :';
```


ACCESSING PRINTER_DAT - (CONT'D)

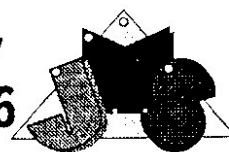
```

680 bold_on$ = FETCH_CODE_STRING$: CODE_STRING bold_on$
690 PRINT'BOLD OFF CODES' :';
700 bold_off$ = FETCH_CODE_STRING$: CODE_STRING bold_off$
710 PRINT'UNDERLINE ON CODES' :';
720 under_on$ = FETCH_CODE_STRING$: CODE_STRING under_on$
730 PRINT'UNDERLINE OFF CODES' :';
740 under_off$ = FETCH_CODE_STRING$: CODE_STRING under_off$
750 PRINT'SUBSCRIPT ON CODES' :';
760 sub_on$ = FETCH_CODE_STRING$: CODE_STRING sub_on$
770 PRINT'SUBSCRIPT OFF CODES' :';
780 sub_off$ = FETCH_CODE_STRING$: CODE_STRING sub_off$
790 PRINT'SUPERSCRIPT ON CODES' :';
800 sup_on$ = FETCH_CODE_STRING$: CODE_STRING sup_on$
810 PRINT'SUPERSCRIPT OFF CODES' :';
820 sup_off$ = FETCH_CODE_STRING$: CODE_STRING sup_off$
830 :
840 REMark translates 1 - 10
850 FOR tr = 1 TO 10
860 PRINT'TRANSLATE';tr;': ' ;
870 t$ = FETCH_CODE_STRING$
880 IF LEN(t$)=1 THEN
890 CODE_STRING t$
900 ELSE
910 PRINT'FROM';CODE(t$);' (';t$(1);') TO ' ;
920 CODE_STRING t$(2 TO LEN(t$))
930 END IF
940 END FOR tr
950 CLOSE #3
960 :
970 DEFine PROCedure CODE_STRING (str)
980 LOCAL a
990 IF str = CHR$(255) THEN PRINT'DEFAULT' : RETURN
1000 IF str = CHR$(0) THEN PRINT'NONE' : RETURN
1010 FOR a = 1 TO LEN(str)
1020 PRINT CODE(str(a));
1030 IF a < LEN(str) THEN PRINT','; : ELSE PRINT : END IF
1040 END FOR a
1050 END DEFine CODE_STRING
1060 :
1070 DEFine FuNction FETCH_CODE_STRING$
1080 LOCAL a,cd_length,temp$
1090 cd_length = CODE(INKEY$(#3))
1100 IF cd_length = 0 THEN RETURN CHR$(0)
1110 IF cd_length = 255 THEN RETURN CHR$(255)
1120 temp$ = FILL$(' ',cd_length)
1130 FOR a = 1 TO cd_length : temp$(a) = INKEY$(#3)
1140 RETURN temp$
1150 END DEFine FETCH_CODE_STRING$

```

Im stillen Winkel 12 • 47169 Duisburg • Germany

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typeset93-ESC/P2

Dedicated text87 printer drivers for all EPSON printers with ESC/P2 including the new Stylus 800 and the upcoming Stylus 300. Supports the scalable fonts, special characters and black graphics for drawing borders etc. **DM 69,90**

QMAKE

Pointer-driven Make program for the GST/Quanta Assembler package. Very comfortable, with many options (including library-building). **DM 44,90**

The Oracle - an ancient tactic-puzzle. You don't have to be fast but clever! Fill different tiles into a field, but there are various rules how to do it. If you can place all the tiles you a bonus - try to obey special rules. Every game is different, you'll never be bored. Features: high-score table, hints for the next move etc. **DM 49,90**

MineField - You need skill and concentration to clear a minefield. Many options, configurable size, number of mines etc. Toolkit II required. **DM 39,90**

HyperHELP for SuperBASIC

Instant help in SuperBASIC! It displays a list of SuperBASIC procedures, functions and keywords currently existing in your machine. Simply click on the name and you get extensive help (English or German). The help files can be updated with any editor, QD, Quill, Text87 so that you can update and add remarks whenever you want. **DM 49,-**

QMenu - the Menu Extension. QMenu is an interface with pre-defined menus (e.g. multi-column file-select, simple-choice boxes, select from lists). The menus can be used from SuperBASIC, machine code and other languages. New character-select menu. [V6.01] **DM 39,90**

Update with new manual **DM 16,-**

QMON / JMON

Brandnew version of the well-known Monitor, Debugger, Disassembler. Adopted for the Pointer Environment. QMON now recognises the various stack frames and cache handling of the different processors (6800x to 68040). A Trap level can be set, and a permanent Breakpoint has been introduced. JMON is a job-monitor with all the features of QMON, but it has got its own, moveable windows, which may be put to sleep etc. - really embedded in the Extended Environment. **New Version (German only) DM 67,-**
Upgrade to V2.08 (German or English) DM 32,90

QL-Emulators for ATARI

QVME - High-Res QL-Emulator for ATARI Mega STE and ATARI TT
PRICE CUT!! **DM 549,-**
EXTENDED4-QL-Emulator for ATARI 260ST, 520ST/STF/STFM, 1040ST,
Mega ST (but not STE!!!) **DM 289,-**
QL-Emulator Brochure **DM 13,-**

Ask for more information about the QL-Emulators!

TERMS OF PAYMENT

Postage and package (Europe) **DM 14,-** (if total value of goods is up to **DM 50,-** then only **DM 9,-**). (Overseas) between **DM 14,-** (1 item) and **DM 35,-** (maximum). All prices incl. 15% V.A.T. (can be deducted for orders from non-EEC-countries). E&OE. Cheques in DM, £'s, Eurocheques and Credit Cards accepted.



BlackKnight - mouse-driven Chess program!

Yes, here it is - chess for the Pointer Environment! Moveable, runs on any display resolution! 5000 moves opening library, demo mode, setup, change sides, load and save game, hint, scrollable move-history etc. 10 Levels of difficulty, giving the computer between 5 seconds to 1 hour time to think. BlackKnight even thinks when it's your turn. **DM 119,90**

The Lonely Joker Version 2!

Now six different games in one! Another three, even more complex potencies have been added to the existing three: Spine, Cropaud & Four-in-a-Hand (two of them work with two packs of cards). More options (different patterns for the reverse side of the cards), high-scores, moveable window for hires screens etc. **DM 59,-**

Upgrade from V1 (double fun - 1/2 price) **DM 29,-**

QSpread - the only Spreadsheet program for the Pointer Environment. Completely mouse- and/or keyboard-controllable! Maximum 32768 cells, where, for example, 16000 cells need about 400kBytes. Macro functions. Easy, quick and comfortable block handling and entry. Many additional functions, which belong to today's standard-equipment: Help, Button, use of the Scrap. The current version adds missing features and more, e.g. cell-reference-adjustment, echo, IF and comparisons, toolbar, time & date functions. [V1.24] **with comprehensive manual DM 169,-**

Update with new manual (useful if old version is <1.20) **DM 16,-**

QSpread Demo Version - send 3 International Reply Coupons if ordered alone, otherwise enclose a spare disc with an order or update and it is free!

QD Version 6!

Brandnew version with brandnew features! **Selective automatic tab compression/expansion!** You can, for example, make QD compress all spaces which fit to tabs into a tab on given file extensions, say _ASM, and get them automatically expanded when the file is loaded again! This saves, even on well-documented source files, between 30 and 40% disk space!!! It also speeds up assembly, as the file gets shorter! Another VERY useful feature is the **permanent line/column display** which does not slow QD down! Editor handling and line handling speeded up. **Bracket match** - position cursor over a bracket () [] { } " ' etc. and press a key-combination, and QD finds the matching bracket or paranthesis! Some minor improvements, keyclick within QD added etc. **QD Version 6 DM 125,-**
Upgrade from Version 5 with new manual DM 26,90
Upgrade from Version 4 with new manual DM 49,90

Applications

QDOS Reference Manual	DM 89,90
RFI	DM 49,90
QPTR	DM 92,-
QSUP	DM 79,90
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Tetris-like game for the QL! Many features, high-score-table, various levels of difficulty, differently shaped items and two-player option! Can be played with keyboard or joystick(s). **DM 42,90**

LineDesign V2

Now available in Version 2. The program is much faster, more user-friendly, supports more printers, includes more fonts (130 in total). It has better text handling and supports special characters now as well as kerning. Other new features are bitmaps, thick lines, pies, squares with round corners etc.

LineDesign V2 DM 259,-

Upgrade from V1 (offer valid until end of March) **DM 59,-**, from then on **DM 129,-**

?!?!?!?!?!?

If you have any questions to the products listed here or if you want more information about the full range of products, simply write to us!

QL Hardware & Spares

FLP/RAM Level 2 device drivers for SuperQBoard	DM 56,-
FLP/RAM Level 2 device drivers for TrumpCard	DM 56,-
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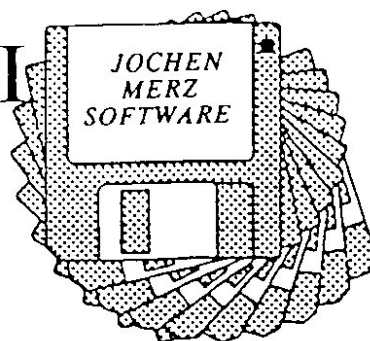
UPDATES

Updates of our software are usually free. The exception: major changes on a program (a new Version number before the '.'). Always send the master disk(s) to us, together with 4 international reply coupons for up to 5 discs or 8 IRC's for more. If you send updates together with a software order, then the return postage is covered by the wholesale postage. If a disk is faulty, add 1 IRC for a replacement. As the software changes from time to time, you may order a new manual together with the disc update. With upgrades, you automatically get a new manual.

THE LONELY JOKER II

Trafford, Alabama, USA - Bob Madaris

THE LONELY JOKER was reviewed in IQLR Vol. 2 No. 2. Since then it has some major changes and a few minor ones. They have added 3 more games to double the original 3 games. This review is on Version 2.



THE LONELY JOKER was developed by HIT & DO Development Team, Coimbra, Portugal in association with Jochen Merz Software, Germany. It was compiled with Q_Liberator from Liberation Software. The program package comes on a single disk and includes a twelve page manual. There are screen dumps provided for each game to illustrate that game. A high score list has been added and the top five scores are saved to a file named TopFive_ljs.

The LONELY JOKER (LJ) is a solitaire card game based on six distinct patiences: Echelon, Napoleon, Cascade, Spine, Crapaud, and Four in Hand.

The program requires QJump's Extended Environment and the Jochen Merz's Menu Extensions which are included in the package. Playing the game really benefits from having a mouse installed - although you can play with the keyboard alone. A memory expansion of at least 384Kb is required to run the program. If you normally have the pointer environment installed, all you need to do to run the program is to EXEC 'LJ'. If not, there is a boot program included to LRUN. LJ is a multitasking program.

Some startup parameters may be defined by the user by using MenuConfig, the Jochen Merz standard configuration utility, or CONFIG by QJump. These are included in the package. The configurable parameters are: Initial game, Board color (black or green), Green color, Warning beep, Max turns, Queen over king (Cascade only), Game directory, Score file. These options and others are available within each game from pull down menus from a menu bar across the top of the screen.

One of the original reviewer's remarks about the green screen being too light has been taken care of with the inclusion of the green color option. You can now select the standard green screen or a darker green screen. This was much better to this reviewer, but I prefer the black board. An option has been added allowing you to choose from five different designs of cards. All of them are very nice graphic displays.

The LJ screen is divided in two areas: The upper one gives access to game control, the lower one is the playing board. If you are using Qpac2, LJ can be put to sleep in a button. The Files, Game, and Options items in the control area (top of screen) introduce pop-up menus with sub-items. To select an item in the control area, all you need to do is move the pointer to it and [HIT] it, or select it directly with a selection key. The Game item allows you to choose one of the six games or to re-deal. The Files item allows you to Save and Load games. Only Napoleon and Four in Hand games can be saved. You may specify different devices and sub-directories by "hitting" them with the pointer or by inserting their names in the appropriate fields. Also, the score table can be viewed and saved.

The Games

Echelon 1: This is the standard solitaire (patience) card game . The game can be played against time taken to solve, but the real enjoyment to me in any solitaire game is beating the game (All cards placed in the foundations). You may use an option to limit turns through the

LONELY JOKER II - (CONT'D)

deck to 2 or 3 turns. Other options: Auto finish, Time, Black or green board, Warning beep, Pack of cards.

Echelon 3: This game is similar to Echelon 1, except three cards are turned over from the closed deck. The same options are available as Echelon 1. There is no limit to the number of times the deck is turned over. In the original review appeared the following: (Bob Dyl has completed this game in 1 minute and 35 seconds playing with a mouse. He challenges anyone to beat this time). This is my favorite of the six. I do not have a mouse to challenge Bob, but found the games are very playable with the keyboard and the keyboard instructions in the manual.

Napoleon: This game known as the "King of Patiences" was supposedly created by Napoleon during his exile on the isle of Sainte Helene. In this game, all cards are shown face up (there is no closed deck). The player has to group 4 complete suits in their foundations, placed in the center. The starting cards of the foundations are randomly set by LJ. This reviewer had no luck with this game and I am not sure that the instructions are adequate for someone who does not know this game. I must admit I spent less time with this game than the others. The options are the same as in Echelon except Restore is added to allow you to start the same game over so as to use a different strategy.

Cascade: This is the simplest of the games to play, but is hard to finish. The purpose of the game is to move all cards from the ranks to the pile. The cards are laid down, initially, in seven open ranks (with 5 cards each), a closed stack, and the pile (which starts with one card). This pushes Echelon 3 as my favorite of the games. I have not beat the game yet, but I have got down to one card left. When you are as far as you can go, the game lets you know how many cards are left. The options: Black or Green board, Pack of cards, Queen over King.

SPINE: This game is a double deck (104 cards) solitaire. As in the others the aim of the game is to place the 104 cards in suit foundations. For every suit the foundation placed in the left side of the board is formed in ascending order, ie Ace to King. The right side will be a descending one, ie King to Ace. The central group of cards is the spine, surrounded by twelve cards: 4 cards at the corners, and the other 8 in the interior positions. The remaining cards are put in the closed deck. This is a difficult game to play, but is very enjoyable. The options are the same as Echelon with an added option for the program to fill the empty spaces in the interior positions with a card from the stack.

CRAPUAD: This game is also played with two decks of cards, and two foundations must be formed. In this game both foundations are in ascending order. Although the object of the game is the same as SPINE, the layout and rules are different. It too is very difficult but enjoyable. The options are the same as SPINE except no auto filling of spaces.

Four in Hand: As in Napoleon all cards are faced up. They are initially placed in 8 ranks. As usual, you must build up the 4 suit foundations on the top left side of the board. On the bottom left side is the player's hand, on which one can place up to four cards. This game is difficult, but easier to understand than Napoleon. The options are the same as in Napoleon.

In all six games you move the pointer with the mouse or the keyboard. The pointer here is a very nice graphic display of an empty hand. Moving a card is easy: place the hand on the card you want to move and pick it up with the (Hit) button or (Space) Key. When you have picked up a card, the pointer will change from an empty hand to a hand with a black or red card (depending on what suit it is). The LONELY JOKER is a well designed program with better than usual graphic displays on the screen. It will provide many hours of entertainment. I think anyone would enjoy some, if not all, of the games in this package.

LONELY JOKER II - (CONT'D)

I literally had to tear myself away to get some work done including writing this review. I have always enjoyed playing solitaire with cards since I was young (It was taught to me by my dad). It is so much easier playing with the computer doing the dealing etc. This program will definitely cause me to buy a mouse and software.

An Author's Response

Newmachar, Aberdeen, Scotland - Norman Dunbar

As the author of WinBack, I read with interest the review of version 2.20 by Don Waltermann, in volume 3, issue 5 and would like to comment on his quibbles.

The ESC key does indeed 'not work' at many places in the program. I am not a Minerva user and do not know all the ins and outs of using it, however, I agree that being able to escape from an edit would be useful. WinBack uses the EDIT\$ function in the Turbo Toolkit and this does not seem to allow ESC to be used.

Many of the files in the various C68 releases have linefeed characters as part of their names. This is the reason for a filename 'spreading' over more than one line on the screen. I did not think of this problem when writing WinBack, but, in the majority of cases, these files are simply on the disc to make the directory listing look good and invariably serve no useful purpose. Removing the offending file from the C68 directory will cure the problem, but pressing SHIFT and F4 together WILL redraw the display and also cure the problem. See Section 7 in the manual on page 5 for details.

I have given some thought to Don's 'wish list' of a utility to assist in making a partial restore and might just do something like that in a future release. If Don would care to get in touch, via Dilwyn Jones as I have recently moved house, with as many details as possible, I will try to accomodate his 'wish list'. WinBack is not a great seller in the QL market place, but who cares, you have to keep your users happy !

For your information, the current release of WinBack is 2.22 and the changes over version 2.20 are :

Version 2.21 writes more information to the listing file. The details of all the settings at the time the backup was started are given. The listing file is appended to if it already exists. This is done so that multiple backup sessions can be recorded and came about when I had backed up two areas of my own hard disc but only got one listing (I always list to a file on ram disc). If you list to a printer there is no problem.

Better error trapping is done on the listing file and READ ONLY etc errors are trapped when attempting to open the listing device. If a listing file fills up the device it is on, you are given the opportuntiy to abort the backup or carry on without a listing. The original listing file will be complete and correct up until then.

Version 2.22 was produced as I moved house in May 1993 and had to update the Credits screen. In addition, the title at the top of all screens has been changed to reflect the fact that WinBack is no longer a Miracle Systems only hard disc backup utility. It has been tested on both Miracle and Falkenburg systems. I hope to be able to test it out soon using Ron Dunnet's hard disc interface & software, just as soon as Dilwyn Jones buys one !

An Author's Response - (CONT'D)

In addition to changing the title, the colours were changed. Some types of mono monitors do not show white ink on red paper, my spare one only shows black ink on any colour paper or any colour ink on black paper. Now everyone should be able to see the title !

As to future enhancements, WinBack will probably be altered to a Pointer Environment version, Don should be able to ESC out of most things then. Watch this space and Dilwyn adverts for details. I should state, however, that I am currently very busy with other work and it may be some time before I get round to it.

As only the screen layouts have been set up so far, get in touch (via Dilwyn Jones or directly) if you have any requests. I can't promise to incorporate all of them, but you never get anything if you don't ask. What I will do, however, is answer all letters received.

May all your backups never be needed !

Products for HP DeskJet Owners

Newport, Rhode Island, USA - Bob Dyl

Recently two products have come to our attention. The first is a high quality laser paper produced by WEYERHAEUSER named FIRST CHOICE. It is by far the best paper I have ever used, to the degree that I cannot tell the difference between a page printed on my DeskJet 500 or my LaserJet IIP, the quality is that good. Where there is quality there's usually high prices. FIRST CHOICE sells for \$6.49 US per ream at Office Max, and I've seen prices up to \$10.00 US in other stores. If you REQUIRE quality then this is the paper for you.

The second item is revolutionary in concept, it's named "RESERVE Ink Jet Cartridge System", as its name implies it is a replacement for the expensive HP cartridges we all must buy. What's unique, is that you get (1) printhead and (5) snap in ink cartridges, unlike the HP cartridge that's all in one. 99% of the time there is nothing wrong with the printhead yet we throw it away or attempt the sloppy mess of refilling the empty cartridge.

I purchased the RESERVE package for the cost of \$50.00 US plus tax, at the going price of HP cartridges I saved \$40.00 US and the quality is as good as HP's ink, the masters for this issue was printed using a RESERVE cartridge. As far as the price goes, I haven't been able to locate it at office supply stores (I purchased mine from a Wholesale Club) as of yet.

RESERVE is manufactured by Pelikan, Inc. (they are a respected second source producer of printer ribbons) of Franklin, TN, USA their telephone number is 800 874 5898.

GOING ONLINE with your QL

Troy, Michigan, USA - Don Waltermann

I've been asked to explain how to use your QL to call a bulletin board system (BBS). I had problems trying to follow a structured approach to explaining everything necessary to use your QL online. So, I decided to just ramble in a couple directions, explaining as I go. Hopefully you'll get the information you need to use your QL successfully with a modem.

I'll try not to assume you are familiar with modems, terminal software and etc. Along the way

GOING ONLINE - (CONT'D)

you'll probably see QBOX-USA mentioned a few times. Since I'm the CO-SYSOP there, I need to take the advantage to encourage everyone to call.

What is a BBS? A BBS is a computer system run for the purpose of allowing computer users to exchange messages, discuss topics of interest, provide support for hardware and software problems and distribute public-domain software. There currently is a network of QL based BBSs running across Europe, the United Kingdom and the United States. These QLs are running a software package called QBOX. This system allows users on any QBOX BBS to communicate with any user on any other QBOX system. This means a call to your local QBOX system can put you in touch with a wealth of QL expertise. I've already exchanged messages with Ron Dunnett of QUBBESoft, Davide Santachiara of ERGON Development, Laurence Reeves of Minerva fame, Tony Firshman of TF Services and many other helpful QL users. Quanta also is available by way of QBOX.

To those vendors not calling QBOX, why don't you? QBOX provides a pool of current QL users that would love to discuss (and maybe buy?) your products. Where else but the QL community could you directly talk to the vendors and software/hardware developers? A current case in point is the rapid development of QTPI/QeM terminal software for the QL. Wayne Weedon has continually asked for feedback about QTPI/QeM to relay back to Jonathan Hudson. Those individuals that took the time to reply found their input used to rapidly improve the programs.

What do you need to call a BBS? You'll need your QL, a modem cable, a modem, access to a phone line, software to communicate with the BBS and a BBS you are interested enough in to call. Lets look at each item in a little more detail.

Your QL: Any QL can successfully be used to call a BBS. My first QL that I used to call BBS's was an original 128k QL with microdrives only. With this base QL I was able to call many bulletin boards to exchange messages and download files. I was lucky enough to have a local PC based BBS that provided a SIG (Special Interest Group) area for Timex/Sinclair computers. The original QL has more capacity than the first computer I used to contact a BBS. I started with a ZX81 and a 300 baud modem. The original QL has some infamous challenges. One of the biggest challenges is Sinclair's marginal implementation of RS232 ports. In the early QL days it was easy to experience buffer overrun when communicating with a BBS. This was due to a combination of two factors. The first is the buggy RS232 implementation in the original IPC chip. It was very easy to overrun the tiny buffer in the IPC (Intelligent Peripheral Controller). There was no way to clear it without completely resetting the QL. This problem has been largely overcome by Hermes. This IPC upgrade has cleaned up the RS232 ports dramatically. In cleaning up the code more space was made available for buffering data coming in from the modem. The second factor is modem buffering. Until recently most modems on the market were unbuffered. That means as the data was received by the modem it immediately passed it on to the QL whether the QL was ready to receive it or not. Newer high speed modems are buffered. This allows the QL to pull a handshake line telling the modem the QL is busy (hold the data in the modem buffer until the QL is able to process some more). The visible result of this problem would be lost or garbled characters on your display or retry errors when transferring a file. When you combine these two factors, you can see how frustrating it was in the early QL days.

The cable: This is a good point to stray off track a little and discuss RS232. Many people think RS232 is a standard. Unfortunately the RS stands for Recommended Specification. Since the recommendation has never been formally accepted as a standard, vendors have been able to

GOING ONLINE - (CONT'D)

freely implement any, all, some or none of the RS232 proposal. This results in multiple non-standard connectors, handshaking with all kinds of different signal lines and polarities and general chaos trying to connect different products. The company I work for makes more than 200 different RS232 cables just to connect different products they make to each other! At work we have a thick cable manual that lists many of the cable pin-outs since we still end up having to modify the cable depending on individual circumstances. The reason I described this mess is that I've had QL users tell me they have gathered together various QL articles giving cable pin-outs to use for a modem. The pin-outs usually disagree with each other. When I was asked 'which one is right' the answer is all of them for that individual use. None of them may be right for you.

Things are not as awful as I've made them sound. I just wanted to explain why there just is no simple answer that is always right. There are a couple of signal lines to change when a cable doesn't work. It usually only takes a few minutes to figure out once you have a little experience. Luckily in the QL modem world the possibilities are manageable. I've seen two modem connectors (DB25 and DB9). The almost standard QL modem port is ser2_. This makes building a cable fairly easy with a little practice. The following is a sample list of of cable wiring for a couple modems I've used:

QL ser2_ US/German	US Robotics 14400 Fax Hayes Smartmodem 2400	Everex EV-946
1	7	5
2	2	3
3	3	2
4	4	4
5	5	6
6	no connection	no connection
7	no connection	no connection
8	no connection	no connection
9	no connection	no connection

If you are having some problems getting going, I'm offering to build and test a cable with your modem and your choice of terminal software. See details at the end of this article.

A modem: The modem will convert the RS232 signal from the QL into analog sounds to transmit on the phone line. At the other end of the phone line the modem does the reverse converting sounds to RS232 that the BBS can understand. The modems on each end translate in both directions. They MODulate/DEMODulate the signal. Modems at 2400 baud and above are fairly standardized. If you get two modems that claim to implement the same V.xx protocol you generally will communicate (as always there are exceptions). The V.xx protocols describe how the modem will modulate the signal. The V.xx protocols do not describe the RS232 commands the QL sends to the modem.

For example the command to dial a number on a Hayes compatible modem is ATDT plus the phone number while on a Racal-Vadic modem it is D plus the phone number while on a Hewlett-Packard modem its just carriage return plus the phone number. Most terminal programs let you configure a dial string so you can use whatever you need. If you haven't yet bought a modem look for one that is Hayes compatible. Hayes has become the defacto common command set. You should be able to use any async modem on the market. If it isn't Hayes compatible it will take a few modifications to the software.

GOING ONLINE - (CONT'D)

The modems to stay away from are those described as sync only or leased line only or 4 wire only (You aren't likely to run into these). These are not designed for BBS use and will not work in our situation. A few comments about modem speed. The current modems on the market are 14400 baud. Since they are buffered your QL would communicate at 19200 baud with them. There are faster ones on the market, 16800 baud, 28800 baud and (V.fast). These modems (those faster than 14400) are very expensive and the real consideration is that they are not standardized at all. They will generally only communicate at their fastest speed with another similar modem. Add to that the maximum QL baud rate of 19200 and you can see why I suggest you stay with something 14400 or slower. At the other end of the speed range are the 300 baud modems. These are generally available for about \$5 at swap meets and flea markets. At a recent show I saw 1200 baud modems for \$2! Some new 2400 baud modems are available for \$9. Most PC based boards will no longer allow callers at 300 baud. Most people type at roughly 300 baud. You can get by at this speed if you rarely use a modem and never transfer files of any size. If you are making a long distance call, the cost of using 300 baud can be large. Most people can read at 1200 to 2400 baud so that seems to be a reasonable speed. If you transfer large files or just capture all your mail into a message buffer then the faster the modem the better for you and your phone bill. QBOX-USA supports calls at 2400, 1200 and 300 baud with no restrictions on 300 baud users.

I believe the current best buy for QL modem users is the Everex EV-946 modem from Halted Specialties. This modem is selling for \$8.95 brand new. Everex was a respected computer vendor that has gone bankrupt. These modems were on the production line but never got put into cases. They are roughly 3" x 6" x 2". I've tested them enough to be able to recommend them. The Everex EV-946 is Hayes compatible. These modems are not for everyone. You must be willing to use a bare circuit board or build your own case. You need to get your own 12 volt AC adapter. You need to make your own cable. There is no warranty on this modem.

Software: Somehow you need to get the QL and the BBS to speak to each other. Here you need a good communications package or sometimes called a terminal emulator. The term terminal emulator comes from early computer usage. Before PCs, terminals were connected to computers using modems. As PCs came into use, software was written that allowed a PC to be substituted for a terminal. Common terminal emulations include VT100 and VT52 (both old DEC terminals), ANSI and ASCII (sometimes called dumb terminal). ANSI emulation provides additional capabilities including color, low resolution graphics and full screen editors. ASCII provides just the opposite, no extra features just the capability to print text. There are many communication packages available for the QL. I have seen many of them but by no means all of them. I'll confine my comments to a few recent public domain programs that have been widely praised by QL modem users.

QTPI - This is the pointer terminal program written by Jonathan Hudson. This program is loaded with features. I use this program exclusively on my own system. QTPI supports ASCII, XModem, YModem, ZModem, Kermit and Sealink file transfer. QTPI is constantly being improved and is in wide use. QTPI works reliably at 19200 baud. QTPI requires the pointer environment (versions available from Quanta have been tested to work). QTPI also requires memory expansion. Latest known version is 1.26. I consider this the program to compare all others against.

QeM - QeM is the first terminal program available from Jonathan Hudson. It does not require the Pointer Environment. It also uses the same file transfer libraries that QTPI uses (the XPR libraries). QeM is still being updated for those users that don't use the Pointer Environment. QeM will just run on a bare 128k QL but won't be able to use the XPR

GOING ONLINE - (CONT'D)

libraries. Memory expansion is strongly recommended. I used this program until QTPI arrived. A full review of QeM version 2.30 was printed in IQLR volume 2 number 6. QeM is now up to version 4.1 (or higher by the time you read this).

QLTerm - This current program is by Jan Bredenbeek and should not be confused with older terminal programs with similar names. Jan describes this program as small and simple. It does not try to be all things to all people. This program is ideal for someone just learning telecommunications or someone using a base 128k QL. QLTerm supports Xmodem file transfers. It supports ANSI, VT52 and ASCII terminal emulation. QLTerm works well at all QL baud rates including 19200.

These three programs all are very well documented and supported by their authors. The programs are public domain and available from many sources including QBOX-USA.

The BBS: All of this prep work is wasted unless you have somewhere to call. There are many bulletin board systems for the QL. Some of these run on a QL software package called QBOX. QBOX-USA is one of these systems. QBOX systems will work with any QL terminal program since QBOX was written to communicate with a dumb terminal. QBOX supports XModem, Telelink and SEAlink file transfers. If you have a PC bulletin board system you'd like to call, you can then take advantage of the ANSI feature of some QL terminal programs. ANSI terminal emulation gives you color displays, low resolution graphics and a full screen text editor. Since ANSI expects a 16 color display, some color combinations are difficult to display on the QL. I use ANSI whenever possible. A BBS functions as somewhat of a cross between a party line phone and a mailbox. You can join in conversations about various topics or leave private mail to an individual. Remember a BBS is not the mail though. A private message still can be read by the SYSOP and anyone else with sufficient capabilities. Many PC based BBSs charge fees for the use of their system. I haven't found any QBOX boards that charge any fees. This is another example of the QL community helping each other out. Each of these boards are taking care of their expenses without asking the callers to help out. Why not give your local QBOX board a call and see what they have to offer?

The offer. If you want to start using your QL with a modem and you are having trouble getting everything working, I'll build a cable and configure a copy of your terminal software. You'll have to send me your modem (if you live in North America), tell me what terminal program you want to use and provide a few details about your QL system. I'll return your package as fast as my work schedule allows. If you have specific questions about QLs and modems feel free to ask me. You can contact me through IQLR.

Halted Specialties Info:

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(You'll need to solder a 3/32" mini plug on. available from Radio Shack)

Some QBOX Bulletin Board Systems:

QBOX-USA	810 2549878	up to 2400 baud
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JM ROM....£10.50(£10)[£11] Power supply ..£17(£16)[£26]
8302 ULA..£10.50(£10)[£11] surface£21]
8049 IPC.....£8.50(£7.50)[£9] 8301 ULA..£10.50(£10)[£11]

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Data sheets.£2.50 (£2) [£3]

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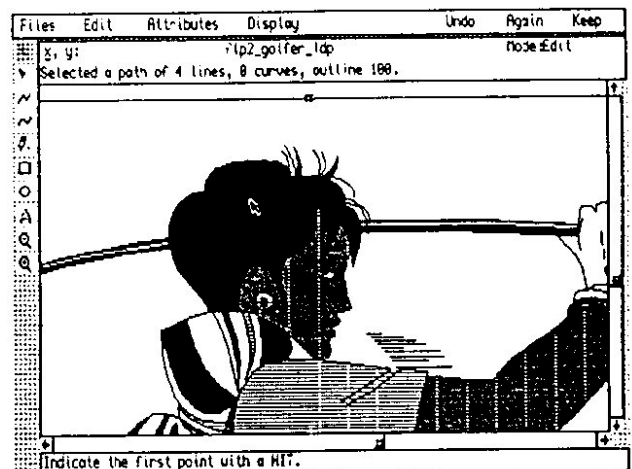
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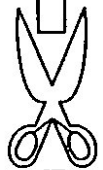
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QBOX-USA BBS

Utica, Michigan, USA -John J. Impellizzeri

QBox-USA is a computer bulletin board system (BBS) set up by QL enthusiasts in the US for all QL enthusiasts in North America (although we welcome callers from anywhere). We maintain a link (Fidonet) with European BBS's that carry QL related message areas. With QBox-USA North American QL users can keep in touch with our fellow QL users in Europe and keep up with the latest developments for the QL and QDOS. There are also file areas with many programs available for download. There is NO charge to use QBox-USA. Your only cost is the phone call to the system.

To borrow a line from an old song, 'What a long strange trip it's been...'

That pretty much describes getting QBox-USA set up and running from the first time it was considered and talked about in Newport, Rhode Island, in June 1993 until the system that is online today.

Long because it seemed like forever trying to learn the software which is scattered among about a half-dozen different programs that make up the various parts of the QBox system. Strange because most of these programs are still in a 'beta' test state with limited or outdated documentation. Strange also due to a few problems that snuck in during a mail exchange with our host BBS in England. To paraphrase Murphy: 'The programmer will have never seen a bug quite like yours'.

The system runs entirely on a Sinclair QL. One of the easier parts was getting all the hardware set up and going. With a few modifications a standard QL can run reliably for long periods of time although there have been a few system crashes. A few due to me learning by experimenting and a few that I can only chalk up as random glitches.

All of the hardware that makes up this system was extra or surplus equipment that was donated by people who wanted to take part in the European Fido echos. Before setting up this system, we had been individually calling the European BBS's. Besides duplicating efforts it was expensive. About the only cost involved so far has been the telephone line installation and of course the monthly phone bill. This is still much cheaper than before due to the fact that the mail files are sent compressed and late at night. Currently we call our host BBS in England (TF Services) once or twice a week to exchange mail using a high speed modem. Most calls take just a few minutes to transfer 100K bytes or so of messages.

Since the system runs from floppy disks, storage space can be a little tight. (We had no extra hard drives or interfaces laying around). While QBox-USA was intended primarily to take part in the message exchange with QL users in Europe, we also wanted to try and maintain a few file areas containing useful public domain software available for download to North American users. We are investigating a few ways of cheaply and simply adding more storage space.

We try and keep the latest PD stuff online here. If there is something you have heard about and it is not here, whether new or old, leave a message to me or Don Waltermann and we'll see if we can get a hold of it or maybe we already have it and can make it available here for you.

For now though most of the confusion has cleared up, Mr. Murphy has been banished (or least kept at bay) and I'm settling into a regular routine maintaining the system and starting to have fun with it. Despite the confusion, hair-pulling and cursing of the computer gods it has been worth it. Comments, good or bad, are always welcome!

QBOX - USA BBS - (CONT'D)

I do have to thank the following people, without them the system wouldn't be running and you wouldn't be reading this! Don Waltermann, Tony Firshman, Jan Bredenbeek, Bob Dyl, Lester Wareham and Chris Fowler.

In this part of the article I will attempt to explain how to use, and some of the features of, the QBox-USA Bulletin Board System (BBS). As the System Operator (sysop), I hope to be able to explain this without hopelessly confusing a brand new user. I apologize if this is extremely boring to an experienced BBS user. What I won't be describing is how to use a communications program to connect with QBox. That is the subject of another article. I will start with once you have made a successful connection and take it from there. Also please note that while there are quite a few BBS's using the QBox software (mostly in Europe, I believe we're the first in the USA), I will only be describing the system that I am the operator of. Other QBox systems will be similar but may have more or fewer, or different options and commands, depending on how the sysop has set up his system and what hardware he has. However, once you learn to use one Qbox BBS, you should have no trouble using any other.

Okay, so you've dialed QBox-USA and the modems have connected. A few seconds after the 'CONNECT' message appears on your screen, QBox will start and send a logon screen. This screen will identify the system, and provide some general info about the BBS and then ask you to enter your first and last name (first name, a space, and last name). Note that it is not necessary to capitalize the first letter of each, QBox will do this automatically, and will recognize you on subsequent logons whether you capitalize or not.

QBox will search through its list of users for your name. If it recognizes you (meaning that you've called before), it will ask you to enter your password. If it can't find your name in the list, it will ask if you are a new user or if you have perhaps entered your name incorrectly. If you're a new user, answer 'Y'. Qbox will greet you as a new user and ask which town you are calling from. I would like to ask North American users of QBox-USA to enter their town or city followed by their state or province. It's nice to know what part of the country everyone is calling from! The BBS will ask for confirmation of the town entered and then ask for the password that you wish to use on this system. Your password keeps someone else from logging on under your name. I won't go into the subject of choosing passwords or their security as that could also be another article. Qbox will ask you to reenter the password you just typed so that it can verify that what you entered the first time was what you really intended. Note that what you type is not displayed for security reasons. If the two don't match, you will have to start over entering a password.

For new users, there may be a questionnaire displayed next asking you to enter some information. Otherwise a message stating no questionnaire today will be displayed.

Once your password has been verified, QBox will display some statistics about your call and then display a bulletin. This bulletin is used to inform users of anything about the system that the sysop wants users to know. It may detail new features, new files available, changes or just news in general. At this point I should explain about a prompt that you will see at certain points while using QBox. This is the 'More? (Y/n)' prompt. Qbox will display this when it has filled your screen and pauses to let you read. It is asking do you want to see more? You can press 'Y' to see more or 'n' to stop. You can also just press Enter which will be accepted as a 'Y'. At any place in QBox where you see a prompt with a choice such as Y/n, the option that is capitalized is the one that will be assumed if you just press Enter. Also, at almost any point in the BBS, you can control the output of the BBS by pressing 'P' to pause the BBS, and 'S' to stop. If you have paused the BBS, just press any key to continue. If you have stopped the output, you will be returned to the menu from where you came.

QBOX-USA - (CONT'D)

After the bulletin is displayed, QBox will scan the message areas for any new messages for you, any new messages in any of the areas since your last call, and if there have been any new files uploaded since your last call. From here you will be presented with the main menu. You can select any of the options on the main menu by pressing the letter in the brackets []. What do all these options do? We'll take each one individually and explain it.

Since the Mail and File options are a bit more involved and have menus of their own, we'll leave them for later and explain the others first.

Pressing 'B' for [B]ulletin will redisplay the bulletin screen that you saw when you logged on. Qbox will also scan the mail and file areas again for you.

[E]ditorial will display just that, an editorial written by (at least for now) me, the sysop. Currently this a little history story about how and why we set up the BBS.

[I]nfo will present you with a list of information items available on the system. Simply enter the number of the item you wish to read or just press enter to quit this option. After the info is presented, press enter to get back to the Info list and read another or quit back to the main menu. Some of the current info available is a list of other known QL/QDOS BBS systems, a list of newsletters & magazines supporting the QL and QDOS and a list of the hardware and software used on QBox-USA.

[S]tatistics gives you a report of your status such as how long you've been online this session, how much time you're allowed per day, the time you have left, the last time you logged on and the number of times you've called this sytem.

[G]oodbye is what you use to log off the system. It will ask for confirmation that you really wish to leave and if so, ask if you wish to leave the sysop a message. A logoff screen will be presented and the times that you logged on and logged off shown. Please use the Goodbye option to log off rather than just hanging up. Logging off properly will ensure that your statistics on the BBS and messages that you've read are recorded properly. It will also ensure that the BBS resets itself for the next caller. If you simply hang up, it will take the BBS a while to realize that you're not there anymore and needlessly ties up the system preventing someone else from using it. Every sysop realizes that there will be occasional problems due to a bad phone connection or a hardware or software problem or crash on your end (or even mine!) that will cause you to be disconnected improperly. Don't worry about it if it happens. But please, always try and log off properly! There! I've said please! (Sysop's everywhere will appreciate it!)

[C]hange user settings takes you to a screen showing your current settings and a menu of items that you can change to customize the way that QBox presents itself to your system. This will also allow you to change your password if you wish. Press the letter of the setting you wish to change. City and password are self explanatory, width is the number of characters per line across your screen you wish and terminal lines is the number of lines down the screen. These should be set to match the terminal software you are using. Usually the default settings are fine for most QL terminal programs. Once you get more accustomed to using the system you may wish to save time by turning off the menus, select help level to do this. There are three levels of help; full menus, brief menus, and no menus. More will toggle the More prompt on and off. If off, QBox will not pause at the end of a screen but will continue displaying until the end. You can still control the output using the P and S keys as explained earlier. If you've made some changes and decide you don't want to change them, press R to return without updating anything. If you're satisfied with your changes, press Q and the changes will be saved and take effect.

QBOX-USA - (CONT'D)

[U]sers will allow you to search for a name to see if that person is a user on this system. You can also get a list of all the users if you wish. The list will show the name, city, and the date and time of each users last logon.

[A]nswer questionnaire will, (if there is currently a questionnaire set up), display the same questionnaire you would see if you were a new user logging on for the first time.

[Y]ell is an option used to call the sysop. It will sound a beeper on the QL running the BBS to call the sysops attention. Please note that the sysop can control whether or not the beeper will sound. If I am going to be nearby the BBS and won't mind an interruption, I will turn it on. However if you try to Yell at 3 AM my time or when I am at work, chances are very good I won't hear it! (It's turned off!) If the beeper is turned off or the sysop doesn't respond, you will get a message saying 'Sysop not present'. If he does, you will enter 'Chat' mode. In this mode, anything that the sysop types on his keyboard will also show up on your screen and vice versa for anything that you type. An electronic conversation!! The sysop can also initiate the chat. You will see a message on your screen saying 'Sysop breaking in for a chat'. When the chat is ended (only the sysop can end the chat), you will be returned to the main menu. You may have to press any key to get the menu redisplayed.

[V]ersion will simply display the revision level of the Qbox BBS software running. We are currently using QBox version 1.191.

Pressing 'M' for [M]ail will take you to the message section. There are currently seven message areas on QBox-USA, each with a different subject or category. In these areas you can exchange messages (mail) with other users. Ask a question about that new software or hardware you just got and need help with, leave a note about a programming problem, or just make a comment about the QL world in general. Two of the areas are local, in other words they exist only on QBox-USA. The others are known as echomail areas. Echomail is a system where messages are echoed or passed between BBS's allowing your messages to be seen by a far greater number of users than they would normally be seen by. A message left by you in one of the echo areas will be echoed among other BBS's carrying the same echo. A reply or message to you entered on another BBS will be seen by you on this BBS. The two local mail areas on QBox-USA are NOT echoed and messages entered here will only be seen by someone calling QBox-USA directly.

When you enter the mail area you will be in the area you were in the last time you called or area #1 if this is your first call. The area number and name will be displayed along with two numbers showing the last message number you have read and the total number of messages in this area. QBox will also scan the area and report (by message #) of any new messages to you, old messages to you and messages you have entered. A sub menu of options in the mail area is displayed next. To read a specific message, simply enter its number and press enter and it will be displayed. Other commands are explained below:

[A]rea change allows you to change message areas. Enter the area you wish to go to, or enter a '?' to see a list of available areas.

[N]ext will display the next message (by number) after the last one that you have read. Note that the last message # read will change as you read messages.

[P]revious will do the opposite and show one message before the last one you read. Note that this will also change the last message read #.

QBOX-USA - (CONT'D)

Also note that by using either of these two commands, you can continue reading in the same direction by simply pressing enter.

[.]Current will redisplay the last read message for you.

[-] and [+] allow you to read either the previous or next reply to the current message (if there is one) rather than reading messages sequentially using Next or Previous, above.

[C] for read [C]ontinuous will simply display each message in order without stopping after each one. This is handy to use if your communications software lets you open a capture or log file. Open the file just before you select this command and all the messages will sent without stopping. When it finishes, close your file. You can then log off and read the messages at your leisure without being online (and running up your phone bill). Note that this command will send messages in the same direction as you have been reading messages (Next or Previous, as above).

[L]ist will present a brief account of the messages by showing the message number, the date it was entered, who it's from, who it's to, and the subject. You can select the starting number to list from or press enter for the current last read message.

[Y]our mail will rescan the mail area and redisplay for you the message numbers of new messages to you, old messages to you and messages you have entered.

[D]elete allows you to delete a message that you have entered. To be deleted, the message must be the current last read message and have been entered by you. For obvious reasons you cannot delete a message entered by someone else.

[S]tatistics and [G]oodbye are the same commands as in the main menu.

[Q]uit will take you out of the mail area and back to the BBS's main menu.

[E]nter message does just that, lets you enter a new message. QBox will print who the message is from and fill in your name for you. Next you will be asked for the name of the user you are sending the message to. If you are entering a message in one of the echo areas, the name will be accepted as is, so be careful of the spelling, otherwise the user may not be notified that there is a message for him. When entering a message in a local message area, the name will checked against the list of users on the system. If the name is not found, you will be given some choices: Abort the message entry, retry entering the name, ignore the warning (if, for example, you wanted to enter a message addressed to: all), or to see the user list to see how the name is spelled. After this, if you are in a local area, you will be asked if this is to be a private message (only readable by the person it's addressed to, note: the sysop can also read private messages). Private messages are not allowed in the echo areas. Next you are asked for the subject of the message. You can then begin entering your message. Note the prompt from the BBS, that words will wrap automatically and to press enter on an empty line to indicate that you are done.

When done entering a message you can [L]ist the message to proofread it, [A]bort the message entry, change the name of the person it's [T]o, change the sub[J]ect, change the [P]rivate status (local only), [C]ontinue entering the message, [E]dit a line, [I]nsert a line, [D]elete a line or lines, or [S]ave the message. The message will not be put on the system until you select the Save message option. You can use any of the above options to get your message looking the way you want before actually placing it in the mail area for others to read.

QBOX-USA - (CONT'D)

[R]eplying to a message is very similar to entering a new message. You will see the same prompts and have the same options. The BBS will offer a suggested name for the 'To user:' prompt and for the subject prompt. The name will be the name of the person who wrote the message that you are replying to and the subject will be the same subject as the original message. You can accept these suggestions by pressing enter at each, or you can enter your own. There is one additional option when replying. You can quote text from the original message if you wish. This might be used to make sure that your reply is understood by having some (or all) of the original message as a part of your reply. If you do select the quote option, all of the original message will be placed at the start of your reply with a '>' character at the beginning of every line signifying the original text. You can then edit the lines as necessary and add your reply.

From the Main menu you can press 'F' for access to the [F]ile areas. The file areas contain many programs that you can download. Note that a download is from the BBS to your computer. Uploads (from your computer to the BBS) are also gladly accepted! When you enter the file area, its number and name will be shown. The name is simply the general category of the files contained in this area. There are currently the following areas on QBox-USA: General Files, Communications, Utilities, Archivers, Pointer Stuff, and Emulators. A further menu of options available in the file areas is displayed.

[A]rea change allows you to change file areas. Simply enter the number of the area or a '?' to see a list of available areas.

[F]ile list will give you a listing of file titles, size in bytes and a short description of each program available in this area.

[V]iew will let you look at a text file online without having to download it first. It will ask you for the filename you wish to view. View only works on files that are text! These are usually signified by an extension such as '_txt'.

[S]tatistics, [Q]uit and [G]oodbye are the same as explained earlier.

Pressing 'D' for [D]ownload will start the download procedure. You will be asked to choose a protocol. QBox currently supports Xmodem, SEALink and Telink transfer protocols. Your terminal software will need to support at least one of these in order to download files. If you select Xmodem you will be asked to enter the name of the file you wish to receive. Since SEALink and Telink allow multiple files to be transferred (batch), you can enter more than one name. As you enter the name (be careful of spelling, use the File list command to see how the names are spelled), the BBS will display its size in bytes and an estimated transfer time based on your connection baud rate. For batch protocols, simply press enter at a filename? prompt to indicate no more files. The BBS will then prompt you to start downloading now and instruct you on how to cancel the transfer if necessary. At this point you should start the download portion of your terminal software. Depending on your software, you should see some type of progress report as the transfer proceeds. After the transfer has completed you will be returned to the File menu.

[U]pload will allow you to send a file from your system to the BBS. Please do not upload commercial or copyrighted programs (unless you own the copyright and wish to place the program in the public domain). You will be asked to choose a protocol and the amount of disk space available on the system for uploads will be shown. QBox will then ask for the filename or names if a batch protocol was selected. After you enter this you will be prompted to begin the transfer from your end and how to cancel if you wish. After the transfer has

QBOX-USA - (CONT'D)

completed the BBS will ask you to enter a short description of the file or files you just uploaded (79 characters maximum).

Just a few more general notes on using QBox-USA: First, for doing file transfers using Xmodem, QBox requires 128 byte blocks. It cannot (currently) handle Xmodem 1K byte blocks. Please make sure that your terminal software is set for 128 byte blocks if using Xmodem for file transfers. Second, the BBS has a three minute inactivity timeout. This means that if the BBS detects no response from you after waiting three minutes, it will disconnect you and reset for the next caller. Don't wait too long while deciding what to do while online. (Hopefully this article will prevent this by explaining what all those commands do!).

Third, I have modified the BBS software so that it will send the 'ENQ' character at logon. What this means is that if your terminal software supports an auto logon sequence by responding to the 'ENQ' you can automate logging on to QBox-USA. Fourth, once you have logged on to a QBox system for the first time, if you do not log on again within 30 days, your name will be automatically deleted from the system. Once you log on the second time, your name will only be removed if you do not log on for over 90 days.

Finally, I hope this article will prompt you to give QBox-USA a try! If you do call, please leave me or my co-sysop, Don Waltermann, a message. Let us know what you think of the system. Let me know what you think of this article. Comments, criticism, and suggestions are always welcome!

QBox-USA can be reached at 810-254-9878. (Detroit, Michigan area). 24 hours a day. 300/1200/2400 baud. A new high speed modem (up to 14400 baud) should be online soon.

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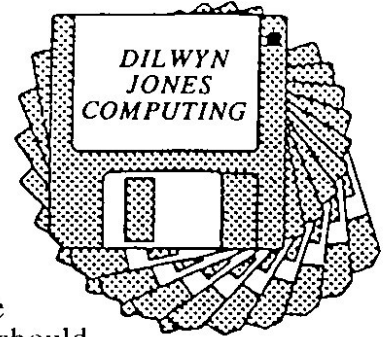
FAX: 714 961 0491

QUICK MANDELBROT III

Oak Ridge, Tennessee, USA - Mel LaVerne

Quick Mandelbrot III is the latest upgrade to the program. Among the updates are an increase in maximum iterations to 511 (for Gold Card users), addition of Mode 4 operation, and some code changes in the interests of more speed.

The program comes with a manual of 15 pages (well, actually 16, but the last page is merely an acknowledgement). The manual is simply but adequately written ; if one just heeds the admonition "When all else fails, read the instructions !", there should be no difficulty in running the program.



QM III is completely menu-driven. The initial menu (F5 Menu) offers the choice of nine items, five of which are entries to sub-menus. The remaining four entries allow toggling Function between the Mandelbrot and Julia sets, toggling Multitask on or off, an opportunity to Restart, and, finally, the sometimes welcome Stop.

From the initial menu, you may select Accuracy to set the number of iterations to any value from 7 to 511 in increments of eight. The higher values were added for Gold Card users. If you elect to go for the high end, most likely there'll be plenty of time for a spot of tea !

The File sub-menu gives entry to Delete, Load, or Save File sub-sub-menus. If Save is selected, you may Save the screen in a form suitable for further processing by QM III or Export the screen as a standard screen file (reloadable to 131072 with LBYTES). Finally, you may Quit, which simply returns to the previous level.

When I first ran QM III, I wondered "Where do I find 'PLOT' ?" After some fumbling and (perish the thought !) READING THE INSTRUCTIONS, I found it. Select Magnify. This gives access to Location (information on current position and size of the area to be analyzed), Rectangle (places a movable, resizeable rectangle defining the section to be selected), and Values.

Values, in turn, permits me to set the Real and Imaginary coordinates and Size of the square to be examined. If Function has been defined as the Julia set, coordinates of the selected point are picked here. Even better, I find here the long-sought magic word "Plot".

If Rectangle is selected, the box defining the area to be examined may be moved about the screen with the Arrow keys, enlarged with the Backslash key, or reduced with the Space Bar. When you are satisfied with size and location, pressing "M" will compute the chosen area at full screen size. "Plot" is not needed here.

From the File sub-menu, a Device may be Formatted, its Directory obtained, or a screen sent to an Epson-compatible printer. You may also Load or Delete files or Save the current screen. Finally, Quit returns you to the F5 Menu.

Occasionally, you will find that the ever-present F5 Menu box interferes with your view of the screen. Your remedy is two-fold. Selecting Move Menu allows you to place the

QUICK MANDELBROT III - (CONT'D)

box in a less objectionable location. If this is not sufficient, the Escape key will temporarily remove the menu from the screen. Space or Enter returns the menu.

The final option selectable from the main menu is Display. This leads to three further choices: Mode, Color, and Black.

Selecting Mode toggles operation between Mode 4 and Mode 8. I find that Mode 4 gives a generally crisper picture than Mode 8. Unfortunately, with the better definition goes a penalty: twice the running time of Mode 8.

The Color (well, "Colour", if you insist) option toggles between Normal and BDM (the Binary Decomposition Method). Normal ordinarily selects colors MOD 4 or 8. BDM tends to merge large areas away from the actual set. The manual does not recommend using BDM with the Julia set.

The Black option determines whether all points calculated as black will be so colored or whether only points in the selected Set will be black. I find the latter choice preferable in that it eliminates the ambiguity inherent in allowing non_Set points to be colored black.

Despite the rather lengthy description above, I have found QM III to be quite easy to use (especially after reading the manual !). The program has extensive error trapping, making it difficult, if not impossible, to do anything really foolish. At least, I haven't been able to get lost for long.

Generally, the Escape key will get you out of a tight spot, returning you to a prior menu. Where Escape doesn't work, such as in a request for a file or device name, entering a null name (simply pressing Enter) generates a brief error message and returns to the previous menu.

So much for the mechanics of the thing. How well does it do its job? Any program, even one written in SuperBasic, can do the job to the required precision. However, in the case of Basic, you might find a calendar to be appropriate as a timing device.

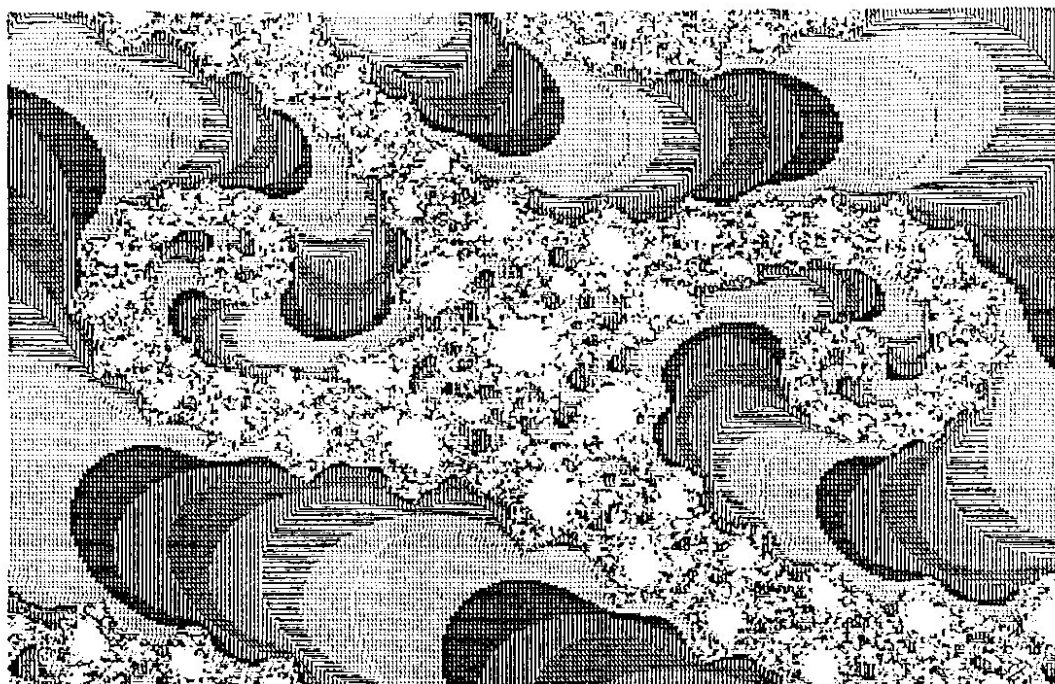
I have run some limited comparisons between QM III and Mandelspeed (from DP's QMaths2, reviewed in IQLR 3-5). "The Beauty of Fractals", Peitgen & Richter (P&R), was as my source of pictures and data. Specifically, Map 45, page 86, was used for the Mandelbrot Set and Figure 4, page 10, for the Julia Set. Input data were obtained from the tables on page 193.

The two screens presented on the next page were computed with Mode = 8, Color = Normal, and Black = Set. Accuracy (number of iterations) was 199.

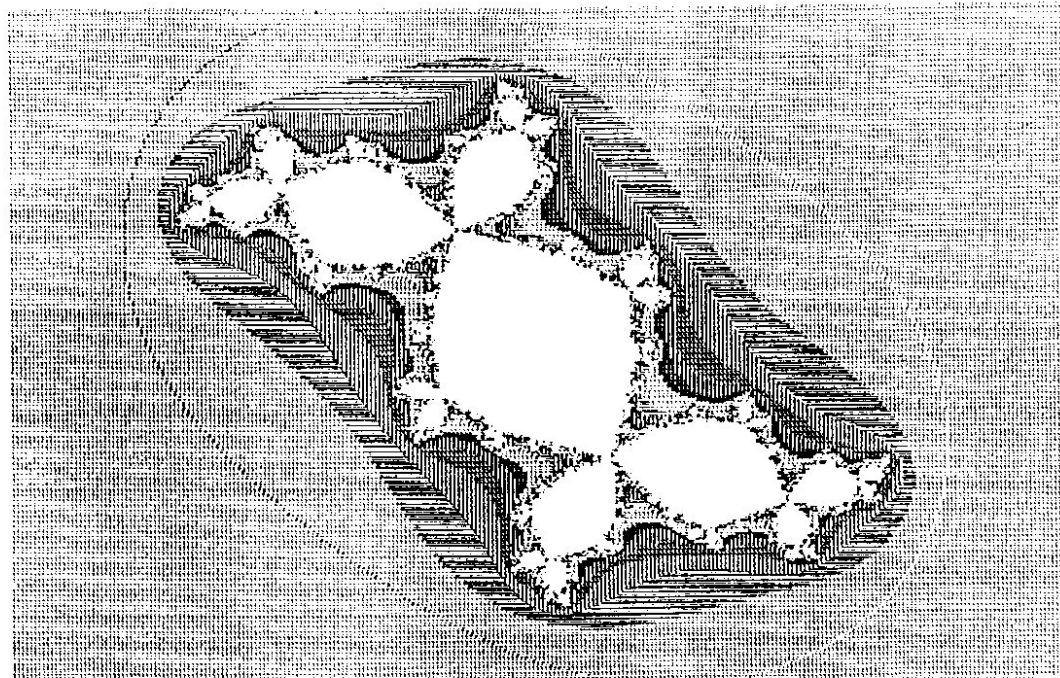
The first screen shows the portion of the Mandelbrot set in Map 45 as drawn by QM III. I consider the agreement with Map 45 to be excellent. Computing time required was 9:25 (565 seconds). The corresponding time for Mandelspeed was 12:40 (760 seconds).

The next screen displays the Julia Set from Figure 4 of P&R. It corresponds to the point $-0.12 + 0.74i$ on the Mandelbrot Set. Once again, the agreement with the figure in P&R is excellent. Computing time was 2:06 (126 seconds). This time, Mandelspeed took only 50 seconds for the same Set.

QUICK MANDELBROT III - (CONT'D)



(Screen #1)



(Screen #2)

Final judgement ? QM III is easy to use, seems virtually fool-proof, has a readable manual, does a good job, and is reasonably speedy. No calendar timing here. I like it; and besides, at 15 pounds Sterling, the price is right. If you enjoy exploring the complexities of the Mandelbrot and/or Julia sets, if you're fascinated by the intricate patterns generated by the simple mathematics used, then QM III could take you on an endless journey.

MIRACLE in NEWPORT II

AN OPEN INVITATION TO ALL QL/QDOS USERS

As mentioned in our last issue, IQLR will be sponsoring the second annual North American QL/QDOS get-together on Saturday the 14th of May 1994. All who were present at MIRACLE in NEWPORT 93 will attest that it's much more than a computer show. It's more like a happening, starting days before as people arrive and lasting a couple of days after the show.

BASE OF OPERATIONS

The base of operations will be the motel where our European friends will be staying, as the rates are the best to be had in the Newport area, we suggest you make your reservations within the next three or four weeks. Please note the following information:

MOTEL 6
249 Connell Highway
Newport, RI 02840 USA
Reservations Tel: 401 848 0600

International Reservations Tel: 505 892 8667
Rates per Day (single) \$38.07 US (incl. taxes)
Rates per Day (double) \$42.55 US (incl. taxes)
Please State : your with the IQLR group

If by chance you don't make a reservation in time fear not, there is in excess of 2,000 hotel and motel accommodations in the area including where the show will be held.

SHOW VENUE

Due to popular demand for a longer show, it became necessary to change the location of this years show as the Salvation Army has a long time commitment with AA that could not be re-scheduled. The new Venue is the MEETING ROOM at:

HOWARD JOHNSON LODGE
351 West Main Road (the main route into Newport)
Middletown, RI 02840 USA
Tel: 401 849 2000

Day : Saturday 14 May 1994

Show Hours: 10:00 AM - 6:00 PM

Vendors will have access to the Meeting Room starting at 8:00 AM.

SOCIAL EVENTS

One of the most talked about events last year was the DUTCH TREAT DINNER (you pay for your own meal) held after the show. We've received a number of calls from people who said they would like it repeated this year. Why tinker with success ?? The DUTCH TREAT DINNER will be held at the same location as last year The NEWPORT BEACH CLUB at 7:30 PM on Saturday the 14th of May 1994 (the time difference will allow the vendors to pack up and join us).

MIRACLE in NEWPORT II - (CONT'D)

The second event a BRUNCH (coffee and doughnuts) will be held on Sunday the 15th of May 1994 at Motel 6 during the open house where you'll be able to mingle with the suppliers and other QL users. The starting time will be 9:00 AM.

Besides the listed events, many of us had lunch, dinner and even cocktails together sharing many a good time last year. We expect the same this year, participation is up to you.

DEMONSTRATORS

Scheduled to attend and demonstrate their latest wares will be Stuart Honeyball of Miracle Systems Ltd., Bill Richardson of W. N. Richardson & Co., Dilwyn and Janet Jones of Dilwyn Jones Computing and Ron Dunnett of Qubbesoft P/D, all from the UK.

From North America will be Frank and Carol Davis of Update Magazine, Paul Holmgren of Mechanical Affinity, Tim Swenson of the QL Hackers Journal, Don Waltermann and John Impellizzeri of Qbox-USA, Bob Gilder of the LIST group and Al Boehm of NESQLUG.

We expect that there may be additions to those named above, we know of others trying to rearrange their schedules.

PRODUCTS and DEMOS

NEW products are expected to be available at the show include: SUPER GOLD CARD, possibly the SCSI interface, the IDE interface, and ALL the latest SOFTWARE from the major suppliers worldwide. We also expect a full compliment of standard QL hardware and software.

Demos will include: a REAL TIME DIGITISER, a fully working BBS and a CLOUD SIMULATION on a QL including lots of pretty screens. Of course talks will be given explaining all the NEW products.

REGISTRATION and FEES

For those of you wishing to register in advance, the fee is \$5.00 US, registration at the door will be \$7.00 US. Registration fees are per person with children under 14 free.

The fee for supplier tables will be \$25.00 per table (6 to 8 ft. long) in advance, or \$30.00 US on the day of the show.

CLOSING REMARKS

If you plan to attend or have any questions, please contact: Bob Dyl at IQLR or telephone: 401 849 3805, we'll be happy to help you any way we can. Why join us for a QL good time.

COME HELP US CELEBRATE THE QL'S 10TH BIRTHDAY



The Town Crier

announces

UPCOMING EVENTS

27 March 1994

(SUNDAY)

QUANTA WORKSHOP:

Bristol
Great Britain

23-24 April 1994

(SATURDAY/SUNDAY)

QUANTA AGM & WORKSHOP:

(Quanta NE)

Park Hotel
Grand Parade
Tynemouth
Great Britain

14 May 1994

(SATURDAY)

MIRICLE in NEWPORT II:

Contact: Bob Dyl
(US 401 849 3805)

Howard Johnson Lodge
351 West Main Road
Middletown, Rhode Island
USA

June or July 1994

QL'S 10th BIRTHDAY SHOW:

Brussels
Belgium